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ABSTRACT

The Smaller Communities Services Program, as noted, is a means of expanding the services of the Oregon Department of Employment to rural and low-income areas in the state. This report is a summary of program findings in rural Jefferson County, Oregon, and is the result of field work performed over a 4-month period by a mobile team composed of 2 supervisors, 1 counselor, 1 labor analyst, and 6 temporary personnel hired in Jefferson County. The field work consisted of contacting all prospective employers in the county to ascertain, for example, estimates of employment in each occupation for July 1970 and July 1973; concurrently, a survey was made which furnished human resource data from 2,713 households. In the document, tables of statistics and accompanying narrative provide information on population trends; agricultural income trends; distribution of wage and salary employment by occupational groups within industry division; distribution of employment by industry, sex, and age groups (nonagricultural wage and salary workers only); labor force status (1968); nonagricultural employment; educational levels; and vocational training. All data on manpower, along with data used to set up occupational profiles of the labor force, are to be retained by the Oregon Department of Employment. (EL)

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SMALLER COMMUNITIES SERVICES PROGRAM
JEFFERSON COUNTY
OREGON

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COMBINED ECONOMIC BASE REPORT AND APPLICANT POTENTIAL REPORT

AN EVALUATION OF THE ECONOMIC AND HUMAN RESOURCES

OF A RURAL OREGON COUNTY

STATE OF OREGON
DEPARTMENT OF EMPLOYMENT

ROSS MORGAN, COMMISSIONER

PREPARED BY
OREGON STATE EMPLOYMENT SERVICE
ELDON CONE, DIRECTOR
CLIFFORD INGHAM, SUPERVISOR OF SCSP

FEBRUARY 1969

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AREA RELATIONSHIP TO WESTERN UNITED STATES

Travel times shown on the map to the right are over the most direct highway route from Madras, Oregon.

U.S. Highway 97 comes into Oregon from central Washington State, passes through Madras, and by way of Bend, Klamath Falls, and Weed, connects up with Interstate 5, providing fast access to California cities. U.S. 97 is a modern all-weather road, containing several connections with highways leading east and west. Another major highway, U.S. 26, crosses the county from northwest to southeast, also passing through Madras, providing a direct route to Portland and also to points east. U.S. Highway 20, is an all-weather access route to the upper Willamette Valley, also to the east, but connections to this route are usually made through Redmond just south of the county line.

While Madras has the third largest municipal airport in Oregon, no regular passenger service is available. Air passengers emplaning for out-of-state destinations can either drive to Portland or fly out of Redmond some 26 miles to the south.

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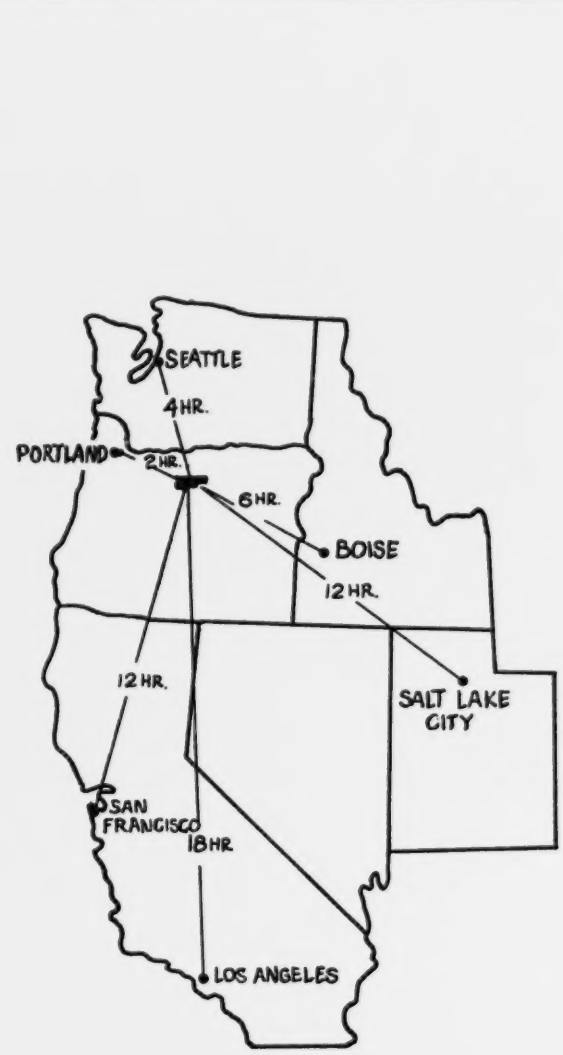


INTRODUCTION

The Smaller Communities Services Program of the Oregon Department of Employment is used as a means of expanding the services of the agency to cope with the needs of rural, low income areas. Many of these areas are served only partially and inadequately by the present system of permanent Employment Service local offices. The overall objective of the program is promotion of the economic adjustment of these areas, including the occupational adjustment of the individual residents. In furtherance of the overall objective, the major responsibilities of the program are to:

(a) Determine the current and potential manpower resources of the area.

(b) Determine the current and projected future manpower needs of the area.

(c) Provide employment counseling and placement assistance to residents of the area with relation to jobs both within and outside the area.

(d) Assist the community in cataloging and evaluating its economic resource.

(e) Cooperate with other agencies and community groups in developing programs for economic development.

The Smaller Communities Services Program is operated by the Oregon Department of Employment under the authorization of, and with funds provided by, the Bureau of Employment Security of the U.S. Department of Labor.

The herein report is a summary of the program findings with relation to Jefferson County, Oregon. These findings are the result of field work performed over a period of four months by a Mobile Team composed of two supervisors, one counselor, one labor area analyst and six temporary personnel hired in Jefferson County expressly for the study. The report was received and approved by county officials prior to printing.

SMALLER COMMUNITIES PROGRAM
JEFFERSON COUNTY

GENERAL DESCRIPTION

AREA DESCRIPTION AND LOCATION

Jefferson County is located in the central portion of the state, slightly northwest of the geographical center of Oregon. It lies just east of the Cascades in the high desert country. The county is bounded on the north by Wasco, on the east by Wheeler, on the south by Crook and Deschutes Counties, and on the west by Linn and Marion.

Madras is the county seat, and is located almost exactly in the center of the county. It is 118 highway miles southeast of Portland, the nearest metropolitan area, and approximately 600 airline miles northeast of San Francisco, California.

TOPOGRAPHY

The county has a total land surface of approximately 1,800 square miles, most of which lies at an elevation of more than 2,000 feet. The western border runs along the crest of the high Cascades, and includes Mt. Jefferson which has an elevation of more than 10,000 feet, as well as several lesser peaks of more than 7,000 feet. The Cascades slope down to a wide rolling to level plateau in the central part of the county, which changes again to hill country in the eastern edge of the county.

Deeply incised canyons provide a generally northward drainage for both the eastern slopes of the high Cascades and the central plateau. Most of the drainage is carried by the Deschutes River, whose principal branches are the Metolius and the Crooked Rivers. The northeastern corner of the county drains to the northeast through several small creeks into the John Day River in Wheeler County.

Ground waters where known--and this is generally in the south central portion of the county--flow northeast and northwest into the Deschutes River area, and in some cases are productive of artesian supply.

The entire western half of the county abounds in lakes, both natural and man-made, with many of them being over 1,000 acres in extent.

CLIMATE

The climate of Jefferson County falls somewhere between that of Western Oregon and that of the Rocky Mountain region or the Great Plains. The high Cascades form a barrier along the western edge of the county and while there is a spill-over of precipitation east of the mountains, it diminishes rapidly from thirty to forty inches annually in the high elevations to less than ten on parts of the basin floor. Generally there is a high percentage of sunshine in most areas of the county.

Extremes in temperature range from lows of 20 to 30 degrees below zero to highs in excess of 100 degrees F., with an average annual temperature of around 50 degrees. Even though the summer daytime temperature may often exceed 100 degrees F., the nights are generally cool and the humidity is low. The average growing season varies from 120 to 140 days per year. The high probability of sunshine and the cool nights are favorable to many crops, and are especially inviting to tourists and sportsmen who enjoy the brisk, dry air, clear skies, and cool nights.

RELATIONSHIPS TO OTHER AREAS

There is a substantial resemblance in topography, climate and industry between Jefferson County and both Wasco County to the north and Deschutes County to the south. There is some commuter worker interchange with Deschutes County, but little or none with Wasco, except within the Warm Springs Reservation, where many workers commute out to the Kah-nee-ta Resort.

Traffic flow through the county is, in general, in north-south directions, over two excellent all-weather roads which cross at Madras, near the center of the county.

One of these roads, U.S. Route 26, provides a direct route northwest to Portland and the lower Willamette Valley. U.S. Route 97 provides a northeast connection to Interstate 80 and Northeastern Oregon, as well as a mainline railroad and ports on the mid-Columbia. Route 97 also provides a junction with east-west traffic approximately 25 miles south of the Deschutes County line.

Good county roads serve the eastern half of the county, but there is only a tenuous relationship with adjoining Wheeler County, mostly because of a natural watershed which cuts off the extreme eastern part of the county. There is likewise a natural barrier to the west, in the form of the high Cascades. Although U.S. Route 20, which provides a connection with the mid-Willamette Valley, does cut across the extreme southwestern part of the county, this route is reachable from the populated portions principally at points outside the county.

The chief commercial relationship is with Portland, over Route 26. However, the Warm Springs Indian Reservation, an area of approximately 850 square miles, sets squarely athwart this route, along with a portion of Mt. Hood National Forest. As a result, there is little or no worker or cultural exchange with the Portland-lower Willamette area. There is one Class I railroad providing north-south freight service to the county on a scheduled basis.

GENERAL

Jefferson County has a total of 1,147,520 acres and is ranked 19 in the state, according to size. Of the total land area, the Federal Government holds 296,645 acres (25%); the state has 6,453 acres (.6%); the Warm Springs Reservation has 235,515 acres (20%), all either tribally or privately owned; and the balance of approximately 600,000 acres (54%) is privately owned. Of the 600,000 acres of privately owned land, almost 500,000 acres are in farm and grazing land.

The county is served by approximately 95 miles of state maintained paved roads, and approximately 180 miles of paved county roads, with another 695 miles of graded and improved county and public roads. The Reservation has 215 miles of roads and the National Forest Service about 52 miles, mostly improved.

Population centers are Madras (1,800), Culver (380), and Metolius (290). Approximately two-thirds of the population live outside the incorporated areas. The bulk of the population and industry is located in the central portion of the county on the Agency Plains. Passenger service is provided by common carrier bus to points north and south, with daily schedules.

INDUSTRY

The basic industry of Jefferson County is Agriculture, with a peak employment of nearly 900 persons and estimated annual gross cash sales of almost $16 million. This industry will be more fully treated on pages 17 through 19; hence, the reference here will be slight.

Slightly more than ten percent of the total farm land is under irrigation, and produces many crop types requiring a considerable amount of hand labor. A large percentage of the farms are owner, or family operated, particularly the medium-sized farms in field crop production. Notwithstanding, there are enough wage jobs, both seasonal and year around, to make this industry of importance. In general, however, the man-hours per acre in segments of agriculture is on a downward trend, although perhaps less so than in some areas in the state.

Trade, although seasonal, is the second largest industry in the county. It has a total volume of approximately $17 million in sales and peak wage and salary employment approaching 800.

Unlike the situation in most Oregon Counties, manufacturing holds only a relatively small proportion of the total employment in Jefferson County. The proportion is expected to increase, however, if present plans for additional lumber re-manufacture materialize. There is also a prospect for some minor diversification in manufacturing employment.

A resume of all nonagricultural industry divisions may be found on pages 20 through 23 of this report.

SOCIO-ECONOMIC FACTORS

HOUSING

The 1960 decennial census shows Jefferson County as having the highest percentage of sound housing, with all plumbing facilities of any Oregon County east of the Cascades and, in fact, ranking sixth among all Oregon Counties in this respect, regardless of location. This is unquestionably due to the tremendous population growth (300 percent) in the county since the mid-1940's, with concomitant need for new home construction. Over 70 percent of the housing units in the county were less than 20 years old at the time of the last census, as compared to 49 percent in the state as a whole. The percentage of owner-occupied housing units is less than the state average, as is the average monthly rental per unit, and median valuation per unit. However, both the rentals and for sale housing offered do include many of the older and less desirable homes; hence, values of adequate modern housing are generally on a par with the rest of the state. There is no real scarcity of higher priced housing, but there is a shortage in the median price range. Overall, both housing and commercial buildings are generally well kept in the incorporated areas.

There is an excellent domestic water supply, but sewage disposal facilities are lacking throughout the county. A collection system and treatment plant is presently in the planning stage for Madras, but the disposal problem is county-wide.

Transient accommodations are provided by ten auto courts having a total of more than 200 fairly modern units; 14 trailer parks with nearly 400 improved spaces, and several camp sites in state or federal parks. In addition, there are approximately 100 trailer spaces scattered in the residential areas in and around Madras, which were occupied by construction workers during the building of the Round Butte and Pelton Dams. These spaces are now vacant, as well as more than half the spaces in the trailer parks, due to departure of the construction workers upon completion of the two projects.

SCHOOLS

Including one elementary school located on the Warm Springs Reservation, there are a total of ten schools, in the county, with an enrollment of 2,548 during the 1967-68 school year. Schools include one junior high school and two high schools. The total instructional staff of 144 provides a teacher-pupil ratio of approximately one to sixteen. Approximately 90 percent of the instructional personnel have at least a baccalaureate degree. Because most of the population is centered in a relatively small area, there is not the fragmentation usually associated with rural Oregon Counties. There are, however, some one and two teacher schools which cannot be escaped and one high school which could probably be consolidated at a savings.

Some limited vocational training is available at the high school level. No post-high school training is offered in the county, but there is an excellent community college in nearby Bend, less than one hour's travel from the population center of the county.

CHURCHES

There are 23 pastored churches involving a total of 15 different denominations in the county. Most of the churches are small, with only five having a membership of more than 100. Total church membership is around 20 percent of the total population, as compared to approximately 30 percent in the state as a whole. This is probably accounted for in part by the high percentage of the population in the younger age brackets and in part by recent heavy in-migration, with many of the in-migrants failing to transfer church memberships from other areas.

FRATERNAL AND SERVICE ORGANIZATIONS

Almost all of the major fraternal and service organizations have branches in Jefferson County. Most of the national farm-oriented groups, both youth and adult, are also well represented.

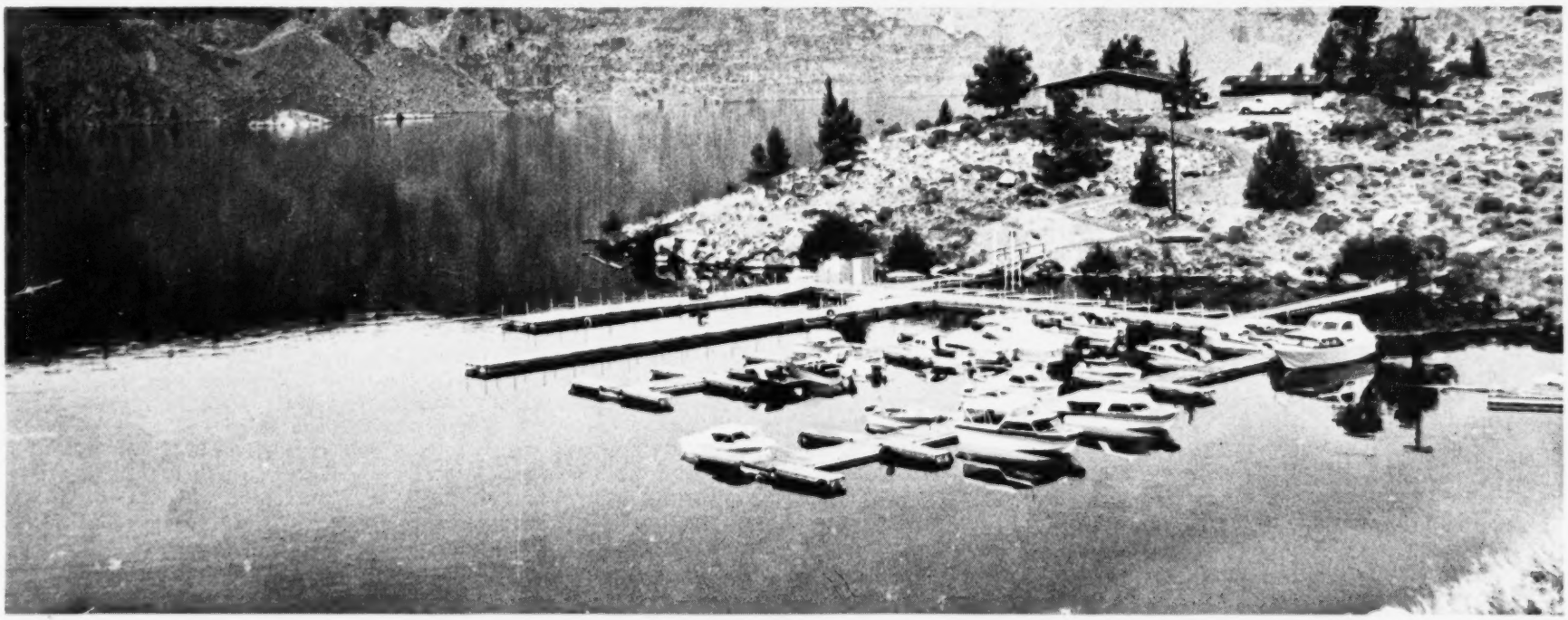
RECREATION

More has been done to develop the out-of-doors recreational facilities in Jefferson County than in any Oregon County east of the Cascades. The county has many natural attractions to begin with, ranging from the snow-capped peaks on the western boundary through the rugged canyons of the central area to the rockhound paradise in the northeastern part of the county. These natural attractions have been enhanced by several man made lakes which offer water based recreation of every kind. (See page 29).

The county also offers one attraction that is unique in all the world. The Kah-nee-ta Resort is the only such facility which is wholly owned and operated as an Indian Tribal project. In addition to offering first class accommodations to the visitor, the project offers what amounts to an educational course in Tribal culture.

Low population density, and distance from any metropolitan area keep the importation of cultural attractions to a minimum. However, Madras has a well-established "little theater" group, and the county has participation in a tri-county cultural association which periodically brings well-known musical groups to the area. There is a fairly active artist association, and one of the more outstanding groups of amateur photographers. Television is available via cable and translator which offers most of the major channels.

There is an excellent county library located in Madras which offers loan service to three outlying points. There is no bookmobile service.



BOAT DOCKS ON LAKE BILLY CHINOOK NEAR COVE PALISADES STATE PARK.

HISTORICAL

As with so much of the State of Oregon, the recorded history of Jefferson County is largely of recent date. The first Caucasian visitor of record was one Peter Skene Ogden, who was the Jedediah Smith of Central Oregon. One might almost say the Kilroy of his day, since there are but few spots between Klamath Falls and The Dalles which do not claim "Peter Skene Ogden stopped here." Oddly enough, it is never Pete Ogden or even Peter Ogden.

Following Mr. Ogden by some 20 years came the Meek party who were lost at the time and seeking to find The Dalles. They, too, did not tarry and the area was still uninhabited by white men when the Federal Government started casting about for a spot to place an Indian Reservation. Wasco County at that time embraced all of the territory between the Cascades and the Rockies, and from the Washington border to the California state line, so it was only natural that the Reservation should be located in Wasco County. It was probably located at that exact spot in Wasco County because the high Cascades intervened between the Reservation and the more settled areas to the west, and was at the same time reasonably close to the military post at The Dalles.

The Federal Government continued to discourage the settlement of Central Oregon for several years after the establishment of the Reservation, although such records as exist tend to establish the Reservation people as being friendly, industrious and inclined to mind their own business.

In 1863, subsequent to the discovery of gold in Idaho (and later in Eastern Oregon) two enterprising gentlemen named Felix and Marion Scott left Lane County, bound for Idaho, with a freight wagon train and a mixed herd of stock. Although they left the Willamette Valley in early spring, the delays encountered in crossing McKenzie Pass took so much time that it was early fall when they reached the Hay Creek area. As a consequence, they spent the winter in a cave near the present Priday Ranch, in what is now North Central Jefferson County, and thereby became the first settlers in the area.

Later, in 1866, one Williamson Allen "took up" land on Hay Creek which was the beginning of the famed "Baldwin Sheep and Land Company." After the retirement of Dr. Baldwin this property eventually passed to other hands and was re-named the Hay Creek Ranch. At its peak of operations in the early 1900's, the Hay Creek property was running 50,000 sheep on 27,000 acres and employed 100 men.

Shaniko, the nearest railroad point, was the world's largest shipping point for sheep and wool, with the Hay Creek Ranch providing a goodly portion of the gross tonnage. Hay Creek also did a flourishing business in crossbred Rambouillet rams, exporting at one time around 4,000 rams annually. A cattlemen-sheepmen range war erupted in 1904 which must have been vigorously prosecuted while it lasted. There are reports of as many as 10,000 head of sheep having been slaughtered by bands of nightriders during the fracas. Hay Creek Ranch deteriorated thereafter and, although more than twice its original size, production is below its previous level. Long range plans provide for increasing the present herd of cattle, a feed lot, and additional wells for irrigation.

For downright excitement, the range wars were replaced in 1909 by a race between the Harriman and the Hill interests to see which would build the first railroad into Jefferson County. Since both crews were following the Deschutes River Canyon (but on opposite sides of the river), they were often in shooting distance of each other as well as close enough to wreak other kinds of mischief, and enough melodrama ensued to stock up a good half dozen grade B westerns. The Hill interests won a close decision in 1911 and the excitement subsided.

Immigrants had been pouring into the area to take advantage of the free land, even before the coming of the railroad. By the year 1914, there were sufficient

inhabitants in the area to petition for establishment of a county. The act of legislature which established the county as of December 12, 1914, also named Culver as the county seat. An election later in the same month named Madras as the county seat and all records were transferred to that city as of January 1915.

The quest of settlers for free land resulted in many cases of marginal land being homesteaded during years of a good water supply. Prior to the present day irrigation systems, there was no help for the land holder in dry seasons or years of low run-off. The result was that many farms were abandoned, or became a part of larger operations and, today, the county is dotted with abandoned farm buildings. Notwithstanding, more acres are being intensively cultivated and farm income is higher today than ever before. Certainly the county history provides an object lesson in the importance of water, and what can be done with an outwardly unpromising area when water in abundance is provided.

No history of Jefferson County would be complete without the story of the confederated tribes of the Warm Springs Indian Reservation. Comprising a total of more than 560,000 acres, the Reservation lies approximately half in Jefferson County and half in Wasco County. It was established in 1855 for the re-location of the Taih, Wyam, Tenino and Dock-spus bands of the Walla Walla Tribe and The Dalles, Ki-gal-twal-la and Dog River bands of the Wasco Tribe. In 1868 a small band of Paiutes were added to the group. The three tribes now number approximately 1,760 persons and are known as the Confederated Tribes. The people live in modern homes and those in the labor force work in the various lumber mills, engage in ranching, or are involved in one or another of the industries owned and operated by the Tribal Council. Among the projects initiated and run completely by the Confederated Tribes, are the well-known Kah-nee-ta Hot Springs Resort, the Warm Springs Forest Products Mill, a housing and maintenance project, and an automobile repair shop. They also have their own law enforcement program and tribal courts. An extensive building program at Kah-nee-ta will provide another complex of motels and recreational facilities to serve the public, and also a fish hatchery is contemplated for the Warm Springs River above Kah-nee-ta. An elementary school which is part of the county school system, enables completion of the sixth grade; pupils beyond that grade are taken by bus to Madras.

Notwithstanding their adoption of every applicable phase of modern progress, the Confederated Tribes still maintain much of their own culture. This is not too evident to the casual visitor, except at times of some of their annual festivals, but the ancient culture and customs are carefully preserved and are a part of the life of every Reservation resident.

BITS AND PIECES

Usually every county in any state has a world's "best, biggest or first" or something through which a claim to fame can be laid. In Jefferson County, this would have to be the world's biggest automobile. Custom built in Portland in 1904, the car weighed 6,800 pounds, had four engines, and was designed to carry passengers between the end of rail at Shaniko and Bend. There now appears to have been some question as to whether man or beast were the more frightened by the general tout ensemble and infernal noise of the machine. At any rate, one irate farmer posted a shotgun guard and refused to allow the machine to pass through his holdings. Because of this and some mechanical troubles with the car, the whole project was abandoned. Fortunately, some fringe benefits in the form a well-constructed road were developed during the period of operation.

* * * * * * * * *

Jefferson County was fortunate in being very little affected by the wagon road land grants which created great land monopolies in so many Eastern Oregon Counties. The Willamette Valley and Cascades Wagon Road Company did manage to acquire a good many sections in the southwestern corner of the county, but most of this has since been re-acquired by the federal government.

* * * * * * * * *

Jefferson County appears to have missed out on the mining excitements of the early days in Oregon. Some gold was apparently found in the county in later years (1896 ?) but, from later reports, it appears the major portion of

the gold came from the stockholders. There was also a consistent quicksilver producer even in modern times. But this is not the stuff of which "excitements" are made.

* * * * * * * *

Perhaps no better illustration of the rise and fall of personal fortunes in Jefferson County could be found than in the story of Henry Coleman. Mr. Coleman took up a ranch at the confluence of Hay and Trout Creeks in 1868. Within 12 years, he had prospered to the point of being able to drive a herd of 2,000 cattle east to Kansas, where he placed them on a ranch to be fed through the winter. The cattle all became afflicted with some mysterious illness and died, but the feeder nonetheless sued Mr. Coleman for $75,000 and secured judgment. This bankrupted Mr. Coleman which put him back where he had started 12 years before.

* * * * * * * *

Today, fortunes may not come so fast in Jefferson County, but they are far more sure, for the person who brings some know-how and a will to use it to the task at hand.

HEADQUARTERS HAY CREEK RANCH.

JEFFERSON COUNTY
POPULATION TRENDS
BY SEX AND AGE GROUPS
1950 - 1968

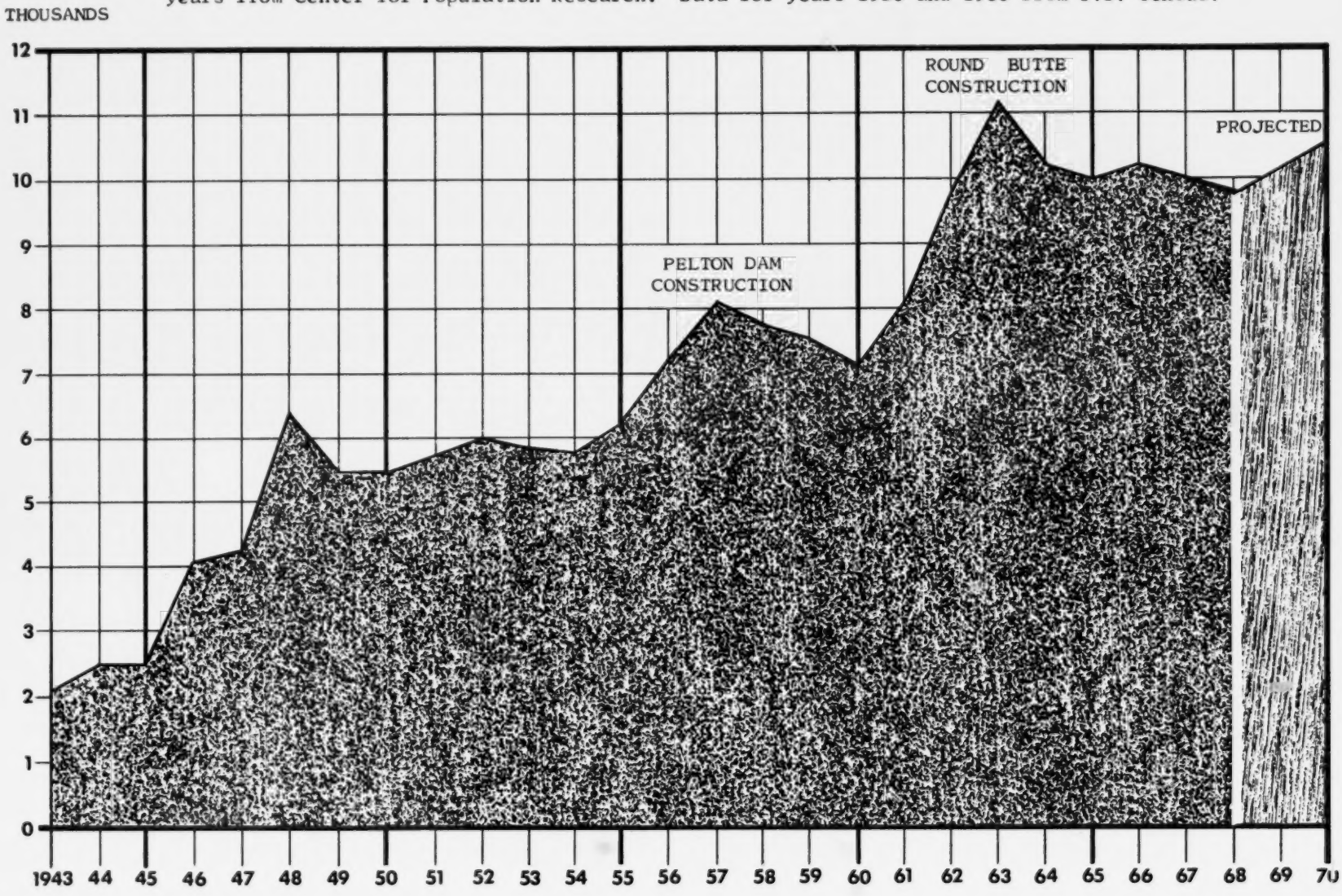
TABLE I

AGE GROUP	1950 TOTAL	1960 MALE	1960 FEMALE	1960 TOTAL	1968 MALE	1968 FEMALE	1968 TOTAL
Under 16	1,931	1,433	1,346	2,779	INA	INA	3,607
16 and 17	191	143	123	266	204	216	420
18 - 24	532	258	279	537	426	476	902
25 - 34	913	436	456	892	563	612	1,175
35 - 44	842	493	473	966	541	599	1,140
45 - 54	553	483	387	870	638	593	1,231
55 - 64	353	283	185	468	456	386	842
65 & Over	221	195	157	352	267	262	529
TOTALS	5,536	2,291*	2,060*	7,130	3,095*	3,144*	9,846

*Does not include persons under the age of 16.

POPULATION

Population figures prior to 1956 from Oregon State Board of Health; 1956 and subsequent years from Center for Population Research. Data for years 1950 and 1960 from U.S. Census.



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POPULATION

The population of Jefferson County has been subject to violent fluctuations during short periods over the past quarter of a century. In general, during this 25-year period the trend has been up.

Records for individual years prior to 1943 are sketchy or missing altogether. From the regular decennial census, it appears there was a 50 percent population loss (from 4,000 to 2,000) during the 20-year period between 1920 and 1940. Whether this was in the form of gradual attrition, or was spasmodic, and associated with the extremely dry years of 1921-22 and 1930-31, is not known. Certainly it seems likely that these periods of dry weather may have caused some out-migration. But whether there were other contributing factors, or whether there were severe losses in a single year, as in 1948-49 and 1963-64, is problematical. There is no history of population trends prior to 1920, since the county was not organized until 1914 and the population for 1910 was included with Crook County.

Through the early 1940's the population of the county remained at, or near, the 2,000 level. However, in the mid-forties the beginning of a tremendous irrigation project brought an influx of construction workers. At the same time, as water became available, many abandoned farms were re-activated and there was a heavy in-migration of both farm workers and farm operators. The net result was that the county population tripled between 1943 and 1948. Some of this population was lost with the departure of construction workers employed on the irrigation project, but the remaining population in 1950 was still more than twice that of 1940.

The population remained fairly stable at nearly 6,000 from 1949 until 1954, when a second water conservation project was begun. The population peak of 1957 appears to have been caused principally by an influx of construction workers for the Pelton Dam project. Similarly, the peak of 1963 was caused by workers on the Round Butte project. Even before completion of the Round Butte Dam, some power line construction was begun in the area and this work, plus the construction of a pipeline for natural gas, has kept a group of more or less nomadic construction workers in the county through early 1968.

At the time when the study of the Smaller Communities Services was completed, there were no abnormal additions to the work force; hence, no worker familes that would need to be discounted in estimating future population trends. On the basis of all available information, it appears the total population found by the Smaller Communities Services Household Study probably represents one of the recurring valleys in Jefferson County population. There are no factors indicating a further decrease. There are some factors which indicate the present level is not a plateau, such as the prospective increase from the present total manufacturing employment, and the prospective increase in employment in the trade and service industries arising out of a growing recreation industry. On the other hand, the trend toward change in agricultural products and agricultural technology may cause a decrease in this sector, despite potential increased acreages.

The Mobile Unit arrived at the conclusion that the population trend will be up, although perhaps at a lesser angle than the overall increase of the past twenty-five years.

Interesting in the population trends of the county are three facts. One is the unusually high percentage of persons under the age of 16. Although this has dropped from 39 percent in 1960 to 37 percent in 1968, it is still considerably above the statewide average of slightly more than 32 percent. Secondly, and at the other end of the age scale, the percentage of persons over 65 went up from 3.9 in 1950 to 5.3 in 1968. Lastly, there is the somewhat puzzling fact that the percentage of females in the 16 and over group has risen in the eight years since 1960 from 47.3 percent to 50.4 percent.

This last fact, like the low median age (24.8 years) of the population is probably explained by in-migration, which also appears to account for the most of the 38 percent population increase of the past eight years.

A contributing factor to the unusual statistics is found in the data for the Jefferson County portion of the Warm Springs Tribal Reservation. Here, almost one-half of the total population is under the age of 16, and 56.6 percent of the persons over the age of 16 are female. However, the total population of the Jefferson County portion of the Reservation is less than 15 percent of the county wide total; hence, the influence of these abnormalities is slight. Worth noting in the data for the Confederated Tribes is the large excess of females in the 16-year through 44-year group. Conversely, in the 45 and above groups, the males outnumber the females. This could be evidence of a tendency on the part of the younger Tribal males to out-migrate upon arrival at the normal working age.

Much the same situation, except to a lesser degree, exists in the county outside the Reservation. Here the population under 16 constitutes only 34.3 percent of the total and females are only 51.9 percent of the total in the 16 to 44-year group. In both the county and the Reservation data, the males considerably outnumber the females in the 45 and over bracket, which is merely one additional contrary statistic in the data of Jefferson County for which no explanation is apparent.

PART OF THE CITY OF MADRAS.

AUTHENTIC INDIAN TEEPEES OR "NEESHAS" FOR VISITORS TO KAH-NEE-TA.

AGRICULTURE

Agriculture contributes to the economy of Jefferson County in several ways. It not only provides income to the farmers themselves, but also to the workers employed in harvesting and processing the varied products raised. In addition, agricultural production receives an input from all other parts of the economy. Jefferson County ranks twelfth in the state in the dollar value of agricultural products, the 1967 gross agricultural income being almost $16 million.

The 1964 Agricultural Census of the U. S. Department of Commerce shows that out of a total land area of 1,147,520 acres in Jefferson County, almost 500,000 acres, or about 43 percent, is in producing farms. A total of 422 farms were shown with an average size of 1,176 acres, but this "average size" is misleading, since 78% of the farm land is in the hands of less than ten percent of the farmers, according to the Census report. About 14 percent of these are under 50 acres, 34 percent are between 50 and 180 acres, with 13 percent having more than 1,000 acres. In common with the national and state trends, the number of Jefferson County farms have steadily decreased over the past ten years. In 1954 the average valuation per farm was $39,359, rising to $59,404 in 1959, and to $92,957 in 1964. In the same period, the average value per acre rose from $36.92 to $76.90. With few exceptions, the number of farms in almost every size category below 2,000 acres showed a decrease, some categories as much as 50 percent.

Most of Jefferson County's agricultural wealth is derived from the 50,000 acres served by the North Unit Irrigation District. The availability of high quality water has enabled efficient farmers to turn marginal dry land into productive, diversified farms. Among the high value crops now raised are potatoes, peppermint, bluegrass and other small seeds contributing to a gross crop income of over $8 million annually from the project. Irrigation in the Deschutes River Basin dates back to 1871. Continuous improvements were made and the North Unit Irrigation District was formed in 1916. Due to financial reverses and the two wars, final construction of the present reservoir system did not begin until 1948. The unit consists of three reservoirs and the main canal, and cost in excess of $12 million. Re-payment of part of this amount is by assessment on each irrigable acre, and a charge per acre foot for water used.

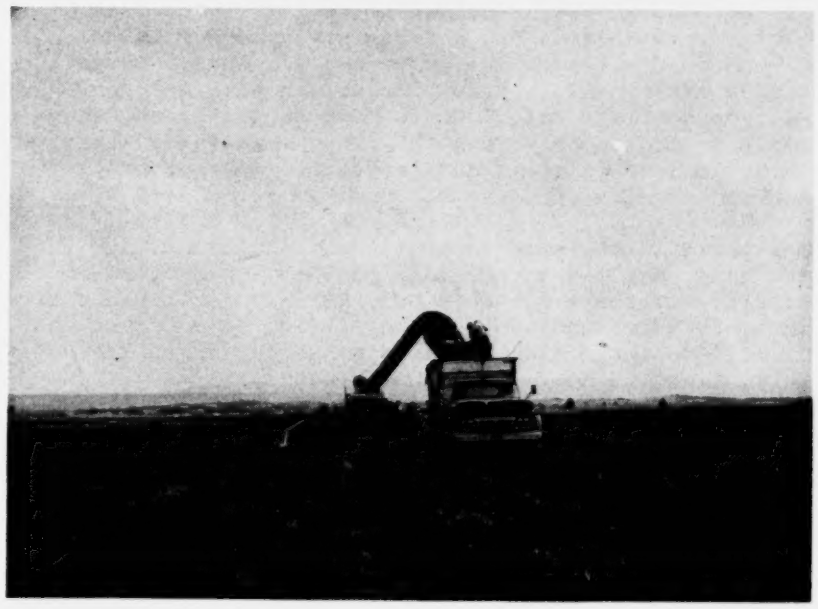
The western portion of Jefferson County is divided between the timbered slopes of the Cascades and the Warm Springs Reservation. While some farming and grazing is done on the Reservation, the bulk of crops are produced in the central plains of the Deschutes River. The soils of the central area are extremely varied and in general composed of a sandy loam. The depth ranges between 16 and 26 inches and is mainly underlain with bedrock, hardpan, or cobblestones. Due to low precipitation, these soils are not highly leached. They contain moderate to large amounts of plant nutrients, but maximum crop production requires the use of chemical fertilizer.

The soils in the eastern portion of the county are much the same, but due to the many pebbles and stones and lack of water are suitable only for dry farming and grazing. This portion of the county grows much of the near $2 million grain crop, besides producing a considerable portion of the beef grown in the county. Some of the beef is later fattened for market on the farms of the central area, where finishing out of both local and imported beef constitutes a sizeable portion of the farm income.

Although more than 400 "farms" were found in the county, more than ten percent of the owner-operators were employed at least half-time off the farm. This was apparently not too closely related to the size of the farm holding, since many of the relatively small, intensively cultivated holdings in the central area actually used more man-hours than many of the larger holdings.

There is an unusually well-coordinated program between the farm producers and the business sector for processing, handling and marketing of farm products. Adequate financing for both producers, processors and marketers is available through two commercial banks, the Farmers Home Administration, a Production Credit Association, and the Federal Land Bank Association.

The outlook for Agriculture in Jefferson County appears good, with both production and quality probably increasing in most areas. Because of excellent weather, proximity to markets, and availability of feed, cattle finishing will probably be up over the long haul. Technological advances in processing will no doubt cause increased production of peppermint.



MINT HARVEST ON THE AGENCY PLAINS.

Potato production, while declining in recent years, is still an important factor. At the time of the survey, everything pointed to a tremendous increase in potato acreage which could produce a 1968 crop in excess of $5 million.

The area offers an ideal location for grass seed production, and this crop will probably continue to be a major factor in the agricultural economy.

Some thought is now being given to the partial conversion of some of the larger ranches to commercial recreation. Oddly enough, it appears that such a move might result in increased cattle production.

GATHERING POTATOES IN THE MADRAS AREA.

AGRICULTURAL INCOME TRENDS *
JEFFERSON COUNTY
1964 - 1967

TABLE II

LIVESTOCK & LIVESTOCK PRODUCTS	1964	1965	1966	1967
Beef Cattle	$ 2,902,000	$ 3,854,000	$ 4,534,000	$ 4,027,000
Dairy, Poultry & Others	322,000	328,000	412,000	326,000
Sheep & Wool	160,000	69,000	45,800	17,000
Hogs	68,000	44,000	51,000	39,000
Total Livestock Income	$ 3,452,000	$ 4,295,000	$ 5,042,800	$ 4,409,000
CROPS				
Wheat	$ 1,619,000	$ 1,620,000	$ 1,797,000	$ 1,366,500
Other Grains	369,000	377,000	436,000	339,000
All Hay, inc. Grass Straw	700,000	605,000	634,000	470,000
Bluegrass Seed	1,467,000	2,429,000	2,120,000	2,228,000
Other Grass & Legumes	184,000	166,000	124,000	165,000
Peppermint, inc. Rootstocks	1,568,000	2,016,000	2,566,000	3,564,000
Potatoes	4,894,000	3,845,000	4,207,000	3,213,000
Total Crops	$10,801,000	$11,058,000	$11,884,000	$11,345,000
TOTAL Est. Gross Agricultural Income	$14,253,000	$15,353,000	$16,926,800	$15,754,500

* Source: Jefferson County Extension Agent.

NONAGRICULTURAL INDUSTRIES

CONSTRUCTION

Construction, which has been one of the leading industrial divisions of Jefferson County since the late 40's, has now tailed off to very near a normal proportion of the total employment in the county. Numerous workers who were employed in the construction of Round Butte Dam and subsequent transmission line work still maintain their homes in the area, while commuting to work out of the county.

The percentage of Construction employment is still slightly high for an agricultural area, and is mostly accounted for by new home and commercial construction throughout the area, plus a planned new construction program in the Warm Springs area.

Most of the Construction skills are represented in the existing jobs, with better than 15 percent of the workers being self-employed. So far as could be ascertained, there are no present plans for any considerable amount of expansion in the division. Replacement should also be minimal; only three percent of the total are females and, aside from the self-employed almost all of those currently employed are below the age of 55.

MANUFACTURING

This industry division held only a little more than 15 percent of the wage and salary work in Jefferson County at the time of the Smaller Communities Survey in 1968. This was down from an average 30 percent of the total employment in the county in 1963, and from a statewide average of approximately 34 percent in 1968. This drop came despite the introduction of several smaller plants, including some food processing, and was caused by the loss of one major plywood facility to fire. Present plans call for rehabilitation of this plant, although with considerably fewer workers than before. On the other hand, there are some plans for expansion of the one major lumber processing plant of the area. There are also some plans for manufacturing diversification, to include transportation equipment and food processing. Altogether, the plans now afoot, if implemented, should create a demand for approximately double the number of manufacturing production workers presently employed.

In addition to those additional workers needed for the projected expansion, it appears there will be a normal amount of replacement need. Approximately ten percent of those now employed are females and some of those now working are past the normal retirement age of 65.

Most of the occupations involved in the planned expansion will be in production work. Only a small percentage will require more training than would normally be involved in a short break in period. Probably 80 percent of the added jobs will be for males and will involve strenuous physical activity.

TRANSPORTATION, COMMUNICATIONS & UTILITIES

Overall, employment in this industry division in Jefferson County is only slightly below the state level. Broken into components, however, Transportation employment is practically nil, Communications employment is considerably below average and Utilities are slightly above the state average.

Transportation, both rail and motor carrier, is generally handled by firms based outside the county and by workers who reside outside the county. In addition, some employment in Transportation is hidden in Trade and Manufacturing.

There are no TV stations in the county, but most channels are available via cable-translator at both Madras and Culver. There is one radio station in Madras providing effective coverage over most of the county. The county

is served by Pacific Bell and one independent telephone company, but there are no central offices in the county; hence, employment in this segment is confined generally to males in the Skilled occupations.

Utilities not only hold the majority of the jobs in this division, they also have a high percentage of the Skilled and Technical jobs. Two hydro-electric generating plants, having a combined capacity of 450,000 KW, are located in the area. These provide employment in such occupations as electrical engineers, powerhouse operators and generator maintenance men.

No expansion is presently forecast for this division. There will likely be a normal amount of replacement need over the next five years since some of the workers in the utilities segment are in the upper age brackets. There are very few opportunities for females in this division.

TRADE

This industry division is the most prolific source of employment in Jefferson County, carrying as it does 32 percent of all the wage and salary work in the area during peak months. It also holds almost 40 percent of the nonagricultural self-employment in the area.

Retail trade also has a certain amount of seasonality, with the peak occurring in the July-August period, and the trough corresponding to some extent with the peak of the wholesale trade.

Wage and salary work in retail trade is approximately 40 percent female on an annual average basis. In wholesale trade, there is a much higher percentage of females in the spring peak period than in autumn. Approximately 25 percent of the jobs in retail trade are in the Service occupations, whereas most of those in wholesale trade are either in material handling or sorting.

Oddly enough, because of the different occupations involved, there is a tendency among retail trade workers to remain unemployed during the peak wholesale trade months and a corresponding tendency among those who are seasonally employed in wholesale trade to not take jobs in retail trade. Thus, the Household Study teams found many of the females, who ordinarily work in potato sorting or cutting, unemployed during July, although some jobs were available in the Service occupations in retail trade. An analysis of weeks reported worked by those who were employed in the Service occupations in retail trade at the time of the study, shows they do not customarily work during the late fall and winter months.

Jobs in the Sales occupations are confined exclusively to retail trade, and have little or no seasonality attached. These jobs are divided approximately 75 percent male and 25 percent female, with the majority of the job holders being in the under 45 years-group. Jobs in the Service occupations are almost 60 percent female, with most of these women being either in the under 24 or in the 45 to 54 year age brackets. Almost all of the males in Service occupations in the Trade industry were in the higher age brackets, as were those in the Managerial occupations.

No employment expansion is currently forecast for wholesale trade. It appears doubtful that there will be any sizeable degree of replacement need either. On the other hand, retail trade does expect approximately ten percent expansion in the next five years and will most certainly have a heavy replacement need, based on the high percentage of younger females now employed, who will probably leave the labor force for several years, and the number of males who will reach the normal retirement age during this five-year period.

Some directional changes in retail trade may also be expected in the next few years. Many of those now self-employed in Trade are actually beyond normal retirement age, and others are closely approaching that age group. Wholesale trade, on the other hand, will probably hold the present course, with the only possible disruption coming from presently unforeseeable changes in buying habits or marketing practices.

FINANCE, INSURANCE AND REAL ESTATE

In Jefferson County, this industry group offers the least in the way of wage and salary jobs, although it is third from the top in the matter of self-employment. Nearly one-

half of the wage workers in the division are female, with their share of the jobs being pretty much confined to the Clerical occupations.

Some expansion in the division is presently forecast, but this may be partially in the form of self-employment. The self-employed already outnumber the wage workers, and this ratio may escalate, rather than diminish.

There will undoubtedly be some replacement need, but it will be very small and probably in the Clerical sector.

SERVICE AND MISCELLANEOUS

Wage and salary employment in this division is almost 60 percent female; if one were to add the self-employed, total workers in the group would be approximately 70 percent female.

Females in the wage worker group fall mostly into three occupational classifications: Professional, Clerical and Service. Male wage workers are mostly in the Machine Trades, Service (including agricultural service) and Bench Work occupations. Among those self-employed, the largest group of males are in the Professional occupations and most of the females are in the Service occupations.

The high percentage of females and the number of wage workers in the upper age brackets will make for a considerable replacement need in this division over the next five years. In addition, presently operating employers are forecasting expansion of approximately ten percent during the same period.

It also seems likely that many new firms will enter the field, as the recreational attractions of the area become better known. All in all, it appears that the next five years will probably bring a worker need in this division amounting to nearly one-third of the number now employed. Most of the prospective need will be in the Service occupations, with probably a scattering in the Machine Trades, Clerical and Professional occupations.

GOVERNMENT

Government offers the second largest source of wage and salary jobs in Jefferson County, with approximately 40 percent of the total jobs being held by females. Approximately 44 percent of the Government employment is in the schools of the county, where 58 percent of the jobs are in the Professional occupations. In the Professional occupations, 57.7 percent of the jobs are held by females. Of the 42 percent of the school jobs in other than Professional occupations (Clerical, Service and Miscellaneous) slightly more than sixty percent are held by women. Of the total 235 wage and salary jobs in the school system, women hold 121 or approximately 52 percent.

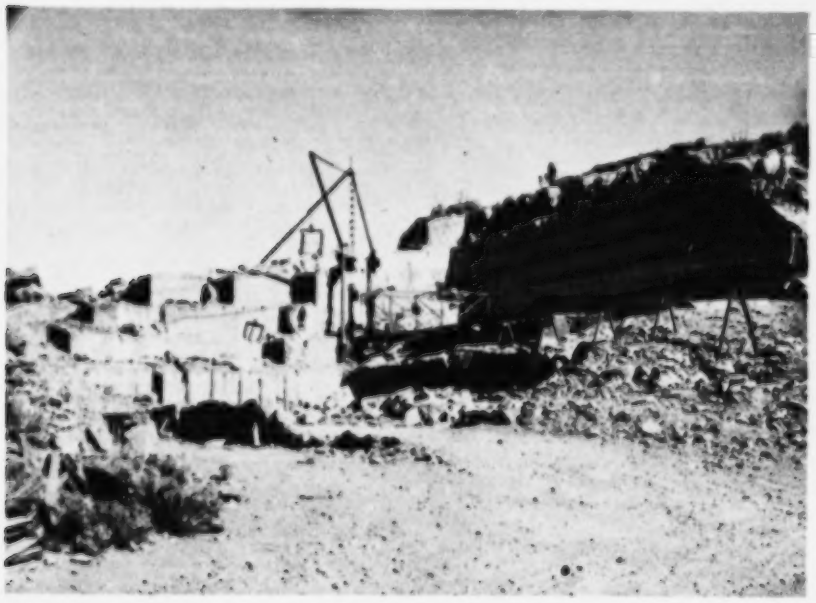
As a group, Jefferson County school teachers are the youngest in the State of Oregon, with only a little over one-third having had ten or more years experience, and close to 40 percent being under the age of 30. At the same time, the group ranks considerably above the median among Oregon Counties in the percentage of teachers with baccalaureate degrees.

Only a very few of the certificated school personnel are past (or closely approaching) the age of 65, but the preponderance of females will probably make for a normal replacement need. In relation to the classified jobs in the school system, both age and the high ratio of female employment are replacement factors. The present teacher-pupil ratio of approximately one to sixteen, combined with other factors such as declining birth rates since 1960 and leveling off of in-migration would indicate no immediate need for any considerable school expansion. However, the need for replacements should keep a fairly good demand for both Professional and classified workers.

The non-education sector of Government offers roughly 300 jobs in a wide variety of occupations. Federal agencies account for slightly more than one-third of the total jobs, with the majority of these jobs being in the Professional, Technical or Clerical occupations. Very few jobs are provided by the State of Oregon; a considerable portion of the state services are furnished on an itinerant basis from state offices outside the county.

Aside from the usual county and municipal jobs, there are a number of jobs in local Government with special districts. The largest of these districts is the publicly owned and operated hospital, which employs approximately 70 persons, (a few of these are part-time) mostly in Service and Professional occupations. Irrigation and fire districts also account for a limited number of jobs, not ordinarily associated with local Government. Most of these are in the Miscellaneous occupational group.

An unusual situation exists in the Warm Springs Reservation, where the usual function of municipal Government (fire and police protection, courts, sanitary service, etc.) are under the aegis of the Confederated Tribes. The Confederated Tribes also operate a number and a variety of businesses, and are nominally classified as a Service industry. However, for the purpose of this report, that portion of their operation involving patently governmental functions has been classified as Government.

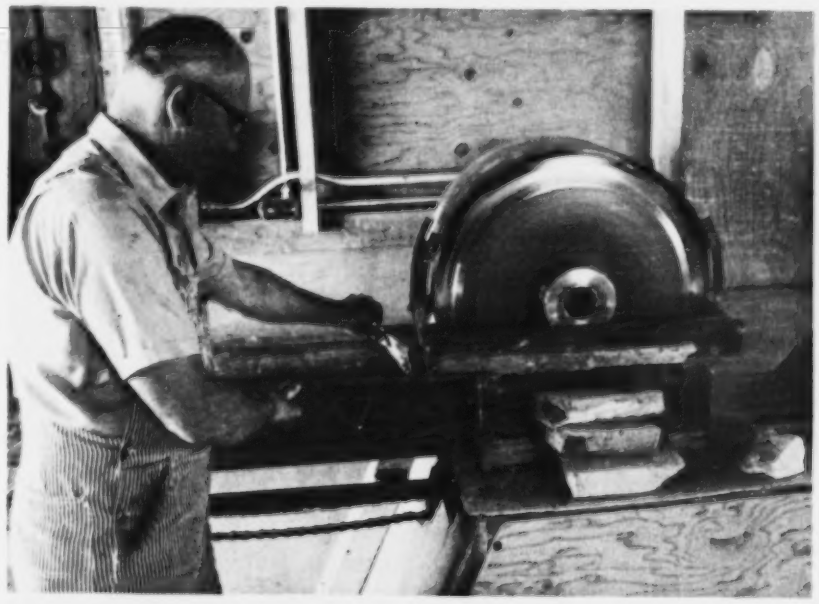


QUARRY OF RED BUILDING STONE NORTH OF MADRAS.

Regular county and municipal Government offers a wide variety of jobs, covering most of the broad occupational groups except Sales and Processing. Approximately one-fourth of the jobs are held by females, mostly in the Clerical occupations. Other than the Clerical, there are concentrations in the Managerial, Service and Structural work occupations.

As a group, the non-education sector of Government tends to make use of the more experienced workers; approximately 18 percent of the workers are above the age of 55, as compared to approximately 11 percent of all wage and salary workers in the county. There is a like variance in the 45 to 54 year group, although not to the same extent.

No expansion in Government is presently planned, but replacement needs should generate a modest demand for additional workers, mostly in the Clerical, Service and Structural occupations.



TRIMMING BUILDING STONES TO SUITABLE SIZE IN THE QUARRY.

TABLE III

DISTRIBUTION OF WAGE AND SALARY EMPLOYMENT BY

INDUSTRY GROUP	Total Wage* And Salary Employment	Females in Group	Professional Technical Managerial	Clerical	Sales	Service
CONSTRUCTION	98	5	5	6	3	0
MANUFACTURING	330	49	25	21	8	6
(a) Lumber & Wood Products	237	20	16	10	4	4
TRANS., COMM., AND UTILITIES	116	5	7	14	2	0
TRADE	697	306	83	78	158	177
FINANCE, INSURANCE, AND REAL ESTATE	58	24	18	24	14	1
SERVICE AND MISC.	331	193	71	52	4	107
GOVERNMENT	541	219	208	66	0	112
(a) Education	235	121	135	18	0	54
TOTAL	2,171	801	417	261	189	403

*Does not include commuters-out.

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OCCUPATIONAL GROUPS WITHIN INDUSTRY DIVISIONS

Farm, Fishing, Forestry	Processing	Machine Trades	Bench Work	Structural	Miscellaneous
3	0	4	2	62	13
0	37	114	9	15	95
0	17	91	2	9	84
0	0	10	0	27	56
0	55	41	0	7	98
0	0	0	0	1	0
49	0	8	5	23	12
33	0	16	2	55	49
0	0	2	0	2	24
85	92	193	18	190	323

TABLE IV

DISTRIBUTION OF EMPLOYMENT
BY OCCUPATIONAL GROUPS, SEX AND AGE
JEFFERSON COUNTY
(JULY 15 - 20, 1968)

MAJOR OCCUPATIONAL GROUP	Total Employment In Group	% of Total Empl.	Females in Group	Females % of Group	Under 24	25 to 34	35 to 44	45 to 54	55 to 64	65 & Over
NONFARM SELF-EMPLOYED	343	9.37	125	36.4	2	57	89	103	61	31
FARM OPERATORS 1/	357	9.76	32	8.9	4	31	93	117	73	39
UNPAID FAMILY WORK 2/	113	3.08	90	79.6	19	47	26	20	1	0
FARM WAGE WORKERS, YEAR AROUND	192	5.25	14	7.3	39	51	30	56	14	2
FARM WORKERS, SEASONAL 3/	293	8.01	83	28.3	190	22	16	26	26	13
NONAGRICULTURAL WAGE AND SALARY 4/										
PROFESSIONAL, TECH. & MANAGERIAL	458	12.54	114	24.9	9	117	139	99	87	7
CLERICAL	273	7.48	213	78.0	66	37	69	67	32	2
SALES	200	5.46	113	56.5	31	62	41	52	12	2
SERVICE	425	11.64	272	64.0	89	93	95	83	61	4
FARM, FISHING & FORESTRY	86	2.35	12	14.0	4	25	29	19	8	1
PROCESSING WORK	99	2.70	47	47.5	18	21	26	29	5	0
MACHINE TRADES	196	5.37	12	6.1	15	48	64	47	21	1
BENCH WORK	27	0.73	9	33.3	2	6	8	6	3	2
STRUCTURAL WORK	236	6.45	1	-- -	15	78	62	70	8	3
MISCELLANEOUS	359	9.81	54	15.0	23	89	99	93	51	4
TOTAL	3,657	100.00	1,191	32.6	526	784	886	887	463	111

1/Does not include operators who work off the farm
2/Includes both agricultural and nonagricultural
3/Less than 26 weeks
4/Includes commuters-out

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DISTRIBUTION OF EMPLOYMENT BY INDUSTRY, SEX AND AGE GROUPS
NONAGRICULTURAL WAGE AND SALARY WORKERS ONLY

TABLE V

MAJOR INDUSTRY GROUP	Total Wage And Salary Employment*	Females in Group	Females % of Group	Under 24	24 to 34	35 to 44	45 to 54	55 to 64	65 & Over	Self-Employed
CONSTRUCTION	98	5	4.9	12	21	33	26	6	0	18
TOTAL MANUFACTURING	330	49	14.8	51	93	99	64	21	2	14
(a) Lumber & Wood Products	237	20	8.9	36	59	84	41	17	0	9
TRANSP., COMM., AND UTILITIES	116	5	4.7	16	24	44	22	10	0	12
TRADE	697	306	43.9	87	181	188	171	67	3	128
FINANCE, INSURANCE AND REAL ESTATE	58	24	41.4	9	11	14	12	8	4	67
SERVICE & MISC.	331	193	58.3	15	96	71	92	49	8	99
TOTAL GOVERNMENT	541	219	40.5	59	103	137	149	87	6	0
(a) Education	235	121	51.4	27	49	65	58	35	1	0
TOTAL	2,171	801	37.8	249	529	586	536	248	23	338

*Does not include commuters-out.

NATURAL RESOURCES

WATER

As with the rest of the State of Oregon lying east of the Cascade Range, water is a resource of prime importance in Jefferson County. However, unlike much of Central and Eastern Oregon, there appears to be a sufficient supply of water in Jefferson County (if properly managed) for present or future foreseeable needs. Almost 90 percent (1,584 square miles) of the county lies within the basin of the Deschutes River and its tributaries. Of the tributaries rising within the county, the Metolius is the most productive of surface water supply, with a recorded minimum of 845 M acre feet and an average of more than one million acre feet per year over a forty-year period. Most of the surface water yield comes from the western side of the Deschutes basin, from streams rising in the Cascade Range.

In addition to the surface water, there are some indications of an abundant supply of ground water, although no extensive studies of this resource have been made. Generally speaking, there is a northern flow of the ground water, although the ground waters from the western part of the county appear to flow northeast as far as the Deschutes River, while those from the eastern part of the county flow a little west of north, also to the Deschutes. This pattern would appear to force a concentration of ground waters along the Geneva-Madras axis, probably at depths in excess of 250 feet. There is some support for this in the flow of ground water at Opal Springs, almost due east of Geneva, which has an average discharge of 223 c.f.s. In addition, a well drilled for municipal supply at Madras developed a flow of 24 million gallons annually, at a depth of 400 feet.

Despite the evidence of an abundant supply of both ground and surface water, there is a need for careful management of this resource if the available supply is to serve the needs of potential future growth in the area. Additional impoundments, even small ones which will serve only for irrigation, erosion control, and restoration of ground waters are desirable. Control of seepage loss in irrigation ditches and better control of irrigation in some areas is also needed.

This is not to say that considerable progress has not already been made in water conservation. As a matter of fact, Jefferson County offers one of the better examples among Oregon Counties in this respect. However, every possible step toward water conservation will be needed, including avoidance of pollution, if the county is to realize its potential.

TIMBER

Standing timber is one of the more important resources of Jefferson County. A comprehensive inventory of this resource, completed by the U.S. Forest Service in 1968, shows a total of 4.65 billion board feet (Scribner rule) of all classes of sawtimber standing on 365,000 acres of commercial forest land in the county. According to this inventory, the acreage is divided into 135,000 acres of National Forest, 136,000 acres of Tribal holdings and 94,000 acres in other private ownership.

The inventory further indicates that, of the total volume of 4.65 billion board feet of commercial timber, 1,909 MM feet is in the National Forest, 2,404 MM is in Tribal holdings and 340 MM is in other private hands.

Information obtained from the Tribal Council indicates an approximate 30 MM sustained annual harvest from the Tribal holdings within Jefferson County. To this should be added the sustained annual cut of 29 MM feet (exclusive of nonregulated) from the National Forest holdings in the county. From this, it appears there is a firm supply of nearly 60 MM board feet of logs per year available within the county. No figures are available on the probable annual cut from the privately owned timber. However, it seems worth noting that the bulk of the privately owned timber is in the hands of lumber processors

and would, presumably, be managed on a sustained yield basis. In addition, the Tribal Council has some 200,000 acres of commercial timber of Wasco County. Present plans call for the milling of this timber at the Tribally owned mill in Jefferson County.

Almost exactly one-half (2,337 MM Board feet) of the total timber supply is in Ponderosa pine. The only other species of note are Douglas fir (1,083 MM board feet) and Engelmann spruce (537 MM board feet) although some ten additional softwood species are found in the county in volumes varying from 15 MM to 280 MM board feet. There are no commercial stands of hardwoods in the county.

There is an apparent, but not actual, discrepancy between the Forest Service inventory of privately owned timber and that of the Oregon Tax Commission. The Tax Commission inventory shows 79,687 acres of privately owned timber land, with a volume of 220 MM board feet, as compared to 94,000 acres and 340 MM board feet of privately owned timber in the Forest Service inventory. The apparent discrepancy is caused by the different classification methods used by the two agencies, with the Tax Commission showing merchantable timber in their inventory.

MINERALS

Minerals are a relatively unimportant resource in Jefferson County. There are some known quicksilver deposits in the eastern edge of the county (mostly in the John Day Basin) and some of the mines are periodically worked with a limited production. While more or less dormant at present, a sufficient potential exists to warrant further exploration and expansion in 1969.

There are also some deposits of semi-precious stones near the north central part of the county which, while not commercially workable, are a very valuable asset to the recreation industry in that they seem to attract a considerable number of the rockhound fraternity.

Both tuff and perlite have been exploited in the past but are not active at present. Production of sand gravel and building stone in the entire county runs approximately a quarter of a million dollars per year. Most of this is for local building needs, but some red stone is shipped to other areas. The oldest rocks in the area appear to be from the late Oligocene or early Miocene period. Nowhere in the area is the geology favorable to formation of petroleum deposits.

RECREATION

The recreation potential of Jefferson County is not only excellent, it is also well developed. Key attraction of the area is the variety offered, which includes about every kind of outdoor recreation except skiing and this activity is available within a ten minute drive from the county's southwest corner.

For those preferring aquatic sports there are six excellent locations, all with boat ramps: Pelton Park at the north end and Perry South at the south end of Lake Simtustus; The Cove Palisades on Lake Billy Chinook; Suttle Lake in the southwest, Olallie Lake in the northwest, and Haystack Reservoir in the south central part of the county. The six locations have a total of 150 camp sites, over 200 trailer spaces and, 350 picnic sites. All are equipped with wood stoves and, in addition, Pelton and The Cove have electric stoves. In addition to excellent boating facilities, all six offer fishing, swimming and hiking trails.

A seventh spot, Camp Sherman, offers an additional 46 camp sites and 64 trailer spaces and the same recreational opportunities with the exception of boating. In addition, Camp Sherman has a state operated fish hatchery at Wizard Falls.

There are also several commercial resorts, some of which specialize in pack trips and the most elaborate of which is probably Kah-nee-ta, in the Warm Springs Reservation and operated by the Confederated Tribes. The vacationers may also fish within the reservation provided a readily obtainable permit is first secured. Other top-rated fishing spots are found along the Deschutes and Metolius Rivers and at Haystack Reservoir.

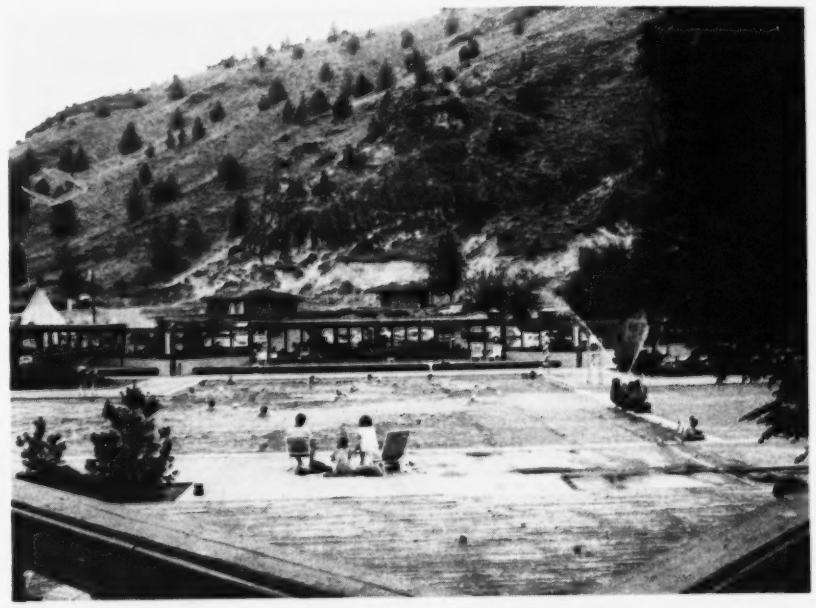
For the hunter, there is an abundant variety of game running from nearly all of the upland birds through migratory

waterfowl (in season) and including mule and blacktail deer. Some elk also range in the Grizzly area, in the south central part of the county.

The area north east of Madras offers some of the finest agate beds in the world. Almost all of the beds are on private property, but one may prospect (and cart away his findings) for a very reasonable fee. For the avid rockhound, there are other locations where it is possible to find fossils and various other odd and unusual specimens.

If the less active pursuits of photography and just plain viewing appeal, there are many areas, notably the canyons of the Deschutes and Crooked Rivers which are worth a trip to the area. In the spectator class there are the rodeos usual to the Oregon cattle country and the Tribal festivals on the Warm Springs Reservation which are not so usual.

LAKE SIMTUSTUS ABOVE PELTON DAM.



OLYMPIC SIZE POOL AT KAH-NEE-TA RESORT.

LABOR FORCE SUMMARY
JEFFERSON COUNTY OREGON
(Week ending July 20, 1968)

TABLE VI

MALE		FEMALE
	TOTAL POPULATION IN COUNTY..... 9,846	
	Under the age of 16..... 3,607	
3,095	TOTAL, 16 years of age & over	3,144
199	Retired	177
109	Unable to work[1]	142
144	Able, but not available	1,280
94	Available but not seeking work	262
546	TOTAL, Not in the Labor Force	1,861
83	Unemployed & actively seeking work	92
218	Self-employed nonagricultural industry	125
325	Farm Operators[2]	32
1,512	Nonagricultural wage & salary workers	847
388	Farm wage workers	97
23	Unpaid family workers	90
2,549	TOTAL Active Labor Force[3]	1,283

1/ Does not include retired persons.
2/ Does not include those working majority of time off the farm.
3/ Includes persons commuting out of the county to work.

THE LABOR FORCE

Of the 6,239 persons in Jefferson County who were 16 years of age and over at the time of the Smaller Communities Study, 3,657 were either employed or self-employed during the survey week. Of the employed group, 193 were commuting to work outside the county. So far as could be ascertained, there were no wage and salary jobs in the county held by commuters-in.

Of the total who were working, 2,359 were engaged in nonagricultural wage and salary work. Only a relative few (47) of these workers were employed less than 30 hours during the survey week.

The study was made at the approximate peak of the employment season. Average year around employment in nonagricultural wage and salary work is approximately ten percent under the peak months.

In addition to the 2,359 persons who were employed in nonagricultural wage and salary work during the survey week, another 608 persons had from 1 to 29 weeks of such employment during the 51 weeks preceding the survey week. These 608 persons do not necessarily reflect employment turnover. In part, they reflect seasonality of work and seasonality of occupations. A prime example of this is the fact that the market in the Service occupations in the Trade and Service industries peaks during the summer months, while the market for the material handling and packaging occupations in the Trade industry does not peak until late autumn. Traditionally, most of those who work in the Service occupations (and were so employed at the time of the study) do not work in material handling and packaging. There is, of course, a normal amount of turnover within individual jobs in all occupations, as well.

At the time of the study, which was also the peak for farm work, there were nearly 300 local seasonal agricultural workers above the age of 16 employed. However, these 300 workers do not begin to represent the total number of persons who performed some agricultural work during the year. More than 400 additional persons above the age of 16 were employed in agricultural work for periods ranging from 1 to 19 weeks during the 51 weeks preceding the study. Many of these persons also work short periods in nonagricultural industry during seasons which do not conflict. No information was developed for those persons below the age of 16, although it is known that there is some agricultural employment in this age range.

In addition to the more than 2,800 Jefferson County residents who were employed in both agricultural and nonagricultural wage and salary work at the time of the study, more than 100 were in unpaid jobs connected with a family operated business or farm; 357 were full-time farm operators and 343 were self-employed in nonagricultural businesses of one kind or another.

Of the 125 females who were self-employed in nonagricultural industry, the majority were operating a joint business venture with their husbands. On the other hand, almost all of the 32 female farm operators were sole proprietors.

The unpaid family workers were largely females and mostly part-time. Generally, they were engaged in keeping small sets of accounts or perhaps "filling in" at rush hours in retail establishments, or in similar jobs which do not require full-time workers. Most of the males in unpaid family work were in the younger age group although there was one semi-retired 61-year old male noted, who worked in the family business "just for fun."

Interestingly, of the 529 persons in the county who are 65 years of age or older, less than 350 consider themselves as retired. More than 100 of this age group were actually employed or self-employed during the survey week. Most of the remainder stated that while they were not seeking work, they would accept any type of work they were capable of performing. Oddly enough, there were 28 persons under the normal retirement age of 65 who listed

themselves as retired. Without exception, all of these early retired persons were male.

Of the total 3,832 Jefferson County residents who were in the labor force at the time of the study 175, or approximately 4.5 percent, were unemployed and stated they were actively seeking work. Although it is noted that only 144 of the total 175 decided to complete work registrations, there is no positive evidence that the 31 who did not file a registration were other than in the active labor force. The most dubious in this respect was a group of 46 females who had worked less than a total of one year in the past five. However, a closer look at this group showed them to be mostly persons with marginal qualifications, who were seasonally employed from 8 to 13 weeks out of each year. Aside from this seasonal work, there are little or no possibilities of these women obtaining employment in their present area. The fourteen males with less than one year of work in the last five were labor force entrants without exception, as were the three females with no employment. The bulk of all the males who were seeking work were still in school; nearly one-fourth were in college.

Classifications were assigned to this group in accordance with their training, prior experience and physical abilities. Taken as a group, those unemployed at the time of the study did have much to offer the right prospective employer, but a lack of occupational diversification at the present time in the area of their residence is apt to make the finding of employment difficult. A tabular exposition of the qualifications of this group is found on page 41.

The more than 350 persons who stated that, while they were not in active search for work, they would accept employment, are a very interesting group. Of the total, some 70 were above the age of 65 and many of these had excellent qualifications in the way of training or experience to offer. Other than those over 65, the bulk of those available for, but not seeking work, were females. There was a certain amount of reluctance on the part of this group to complete a standard work registration; hence, little is known about the majority of the group except their education and vocational training. Mostly, they represent females who left their most recent employment to accompany their husbands to the area. "Most recent" in some cases runs into double figures in years, but a fairly high percentage have had employment within the past five years. Of those who did complete work registrations, more than half were classifiable only in occupations presently non-existent in the county. This is an understandable situation in an area such as Jefferson County, with an expanding population but limited industrial and occupational range. Table VIII on pages 35 through 39 relates to the occupational qualifications of this group.

Of the more than 3,600 Jefferson County residents who had employment of some nature during the survey week, almost 200 were working outside the county. Page 49 offers an analysis of these commuters, hence no comment appears needed here, except that about half of the total are nomadic construction workers not normally a part of the Jefferson County labor force and who will probably remove from the area very shortly. The remainder of the commuters embrace a variety of occupations, and could be of interest to anyone in the market for their particular skills.

NEW JEFFERSON COUNTY COURTHOUSE AT MADRAS.

TABLE VII

LABOR FORCE STATUS BY AGE GROUPS
(Persons 16 years of age and over)
JEFFERSON COUNTY
July 15 - 20, 1968

AGE GROUP	TOTAL IN GROUP	EMPLOYED*	UNEMPLOYED AND ACTIVELY SEEKING WORK	AVAILABLE, NOT SEEKING	NOT AVAILABLE
16 through 24 years	1,322	526	116	167	513
25 through 34 years	1,175	784	14	16	361
35 through 44 years	1,140	886	17	32	205
45 through 54 years	1,231	887	6	12	326
55 through 64 years	842	463	19	54	306
65 years and over	529	111	3	75	340
TOTAL	6,239	3,657	175	356	2,051

*Includes (a) self-employed (b) unpaid family workers (c) commuters-out and (d) agricultural workers and farm operators.

NONAGRICULTURAL EMPLOYMENT BY OCCUPATION*

TABLE VIII

	-------PRIMARY CLASSIFICATIONS-------			------SECONDARY CLASSIFICATION-------		
	Employed	Unemployed	Available	Employed	Unemployed	Available
MAJOR OCCUPATIONAL GROUP: 1 PROFESSIONAL, TECHNICAL & MANAGERIAL						
Architecture & Engineering Sub-Group (00 - 01)	13	1	0	0	0	0
Physical, Life & Social Sciences (02 - 05)	15	0	0	0	0	0
Medicine and Health (07)	44	0	0	0	0	0
Education & Archival Sciences (09 - 10)	138	1	1	0	0	0
Legal Science (11)	8	0	0	0	0	0
Religion (12)	18	1	0	0	0	0
Writing, Art & Entertainment (13 - 15)	22	0	2	0	1	0
Administrative & Managerial (16 - 18)	539	1	0	0	0	1
Miscellaneous in P.T.M. Group (19)	4	1	1	0	0	0
TOTAL in Major Group	801	5	4	0	1	1

*Includes farm operators, nonagricultural self-employed and commuters-out.

	PRIMARY CLASSIFICATION			SECONDARY CLASSIFICATION		
	Employed	Unemployed	Available	Employed	Unemployed	Available
MAJOR OCCUPATIONAL GROUP: 2 CLERICAL & SALES						
Stenography, Typing, Filing (20)	49	8	3	0	0	0
Computing (21)	51	4	1	0	0	0
Material & Production Recording (22)	47	9	3	0	0	3
Misc. Clerical (23 & 24)	126	8	5	26	0	1
Salesmen Services (25)	117	1	0	0	0	0
Sales Commodities (26 - 28)	0	3	9	13	0	0
Merchandising, Except Sales (29)	83	9	9	15	0	4
TOTAL in Major Group	473	42	30	54	0	8
MAJOR OCCUPATIONAL GROUP: 3 SERVICE						
Domestic (30)	33	3	13	0	0	0
Food & Beverage Prep. (31)	168	15	8	12	3	0
Lodging & Related (32)	59	1	9	2	1	0
Barbers, Beautician & Related (33)	14	0	0	0	0	0
Amusement & Recreation (34)	14	2	2	7	0	0
Misc. Personal Services (35)	39	1	11	0	3	0
Apparel & Furnishings Services (36)	7	1	5	3	0	0
Protective Services (37)	56	0	12	0	1	2
Building Service (38)	35	2	13	2	1	0
TOTAL in Major Group	425	25	73	26	9	2

	-------PRIMARY CLASSIFICATION--------			------SECONDARY CLASSIFICATION-------		
	Employed	Unemployed	Available	Employed	Unemployed	Available
MAJOR OCCUPATIONAL GROUP: 4 FARMING, FISHING & FORESTRY						
Plant Farming (40)*	532	7	0	11	8	0
Animal Farming (41)*	189	5	0	8	1	0
Misc. Farming (42)*	123	9	37	0	0	1
Fishery & Related (43)	6	0	0	0	0	0
Forestry (44)	57	1	5	0	1	0
Agricultural Service (46)	21	0	0	1	0	1
TOTAL in Major Group	616	22	42	20	10	2
*Includes farm operators.						
MAJOR OCCUPATIONAL GROUP: 5 PROCESSING						
Food & Related (52)	64	16	56	0	8	2
Wood & Wood Products (56)	26	0	17	0	1	1
All Other Processing (55 - 57 - 59)	9	0	3	0	0	2
TOTAL in Major Group	99	16	76	0	9	5
MAJOR OCCUPATIONAL GROUP: 6 MACHINE TRADES						
Metal Working (60 - 61)	14	1	0	0	0	1
Mechanics & Repairmen (62 - 63)	63	4	0	0	0	0
Printing (65)	4	0	0	0	0	0
Wood Machining (66)	103	4	12	0	3	0
All Other Machine Trades (67 - 69)	12	0	4	0	0	0
TOTAL in Major Group	196	9	16	0	0	0

	-------PRIMARY CLASSIFICATION--------			------SECONDARY CLASSIFICATION-------		
	Employed	Unemployed	Available	Employed	Unemployed	Available
MAJOR OCCUPATIONAL GROUP: 7						
BENCH WORK						
Assembly & Repair of Electrical Products (72)	12	12	0	0	0	0
Fabrication & Repair of Leather and Textile Products (78)	5	0	12	1	0	0
Painting & Decorating (74)	4	0	0	0	0	0
All Other Bench Work (70, 71, 73, 75, 76, 77, 79)	6	3	6	0	0	1
TOTAL in Major Group	27	15	18	1	0	1
MAJOR OCCUPATIONAL GROUP: 8						
STRUCTURAL						
Metal Fabrication (80)	5	2	0	0	0	0
Welding & Related (81)	19	2	3	0	0	0
Electricians (82)	18	0	0	0	0	0
Painting, Plastering, Concrete Work and Related (84)	22	0	1	0	0	0
Excavating, Grading & Paving (85)	131	4	3	0	0	0
Construction N.E.C. (86)	41	12	0	0	0	1
Structural Work (89)	13	2	0	0	2	0
TOTAL in Major Group	236	22	7	0	2	1

	PRIMARY CLASSIFICATION			SECONDARY CLASSFICATION		
	Employed	Unemployed	Available	Employed	Unemployed	Available
MAJOR OCCUPATIONAL GROUP: 9						
MISCELLANEOUS						
Motor Freight (90)	80	3	0	0	0	0
Transportation Occupations N.E.C. (91)	27	7	14	9	0	0
Packaging & Material Handling (92)	135	5	0	0	0	1
Mining (93)	8	1	0	0	0	1
Logging (94)	71	4	7	3	0	0
Production & Distribution of Utilities (95)	29	0	0	0	0	0
Other Miscellaneous (96 - 97)	9	0	0	0	3	1
TOTAL in Major Group	359	20	21	12	3	3

TABLE IX

EDUCATION OF PERSONS 16 AND OVER
(Whether in the Labor Force or Not)

SCHOOL YEARS COMPLETED	MALE	FEMALE	TOTAL
0 - 4 years	79	60	139
5 - 8 years	591	429	1,020
9 - 11 years	725	836	1,561
12 years	1,047	1,266	2,313
13 - 15 years	399	348	747
16 years	118	146	264
17 years or more	136	59	195
TOTAL	3,095	3,144	6,239

40

TABLE IX-a

EDUCATION OF PERSONS 18 AND OVER
(And in the Labor Force)

SCHOOL YEARS COMPLETED	MALE	FEMALE	TOTAL
0 - 4 years	19	22	41
5 - 8 years	351	114	465
9 - 11 years	501	103	604
12 years	956	696	1,652
13 - 15 years	377	103	480
16 years	102	22	124
17 years or more	119	41	160
TOTAL	2,425	1,101	3,526

TABLE X

EDUCATION OF THOSE SEEKING WORK

MALE		FEMALE
0	.....0 through 4 years.....	0
6	.....5 through 8 years.....	17
60	.....9 through 11 years.....	36
14	.....12 years	27
2	....13 through 15 years.....	8
1	.....16 years.....	3
0	....17 years or more.....	1
83	.....TOTALS.....	92

VOCATIONAL TRAINING OF THOSE SEEKING WORK

MALE	TRAINING	FEMALE
62	None	34
13	One year	11
8	Two years	42
0	Three or more years	5
83	TOTALS	92

TOTAL YEARS WORKED IN PAST FIVE

MALE		FEMALE
0	None	3
14	Less than one	46
56	One to two	21
2	Two to three	19
11	Three to four	4

TABLE X-a

SKILLS OF THOSE SEEKING WORK

MALE			FEMALE	
Primary	Secondary		Primary	Secondary
3	1	Professional, Technical, Managerial	2	0
4	0	Clerical	25	0
3	0	Sales	10	0
4	0	Service	21	9
15	7	Farming, Fishing, Forestry	7	3
1	0	Processing	15	9
8	3	Machine Trades	1	0
7	0	Bench Work	8	0
20	2	Structural	1	0
18	1	Miscellaneous	2	2
83	14	TOTAL	92	23

TABLE XI

CAPABILITIES OF THE INACTIVE LABOR FORCE

Based on Work Experience. Primary	Secondary	Occupation	Basis Other Than Work Experience. Primary	Secondary
2	0	Professional Technical Managerial	2	1
10	1	Clerical	2	3
16	0	Sales	2	4
62	2	Service	11	0
42	1	Farm Fishing Forestry	0	1
76	2	Processing	0	3
13	1	Machine Trades	3	0
15	1	Bench Work	3	0
7	1	Structural	0	0
20	2	Miscellaneous	1	1
263	11	TOTAL	24[1/]	13

1/ Information for valid classification lacking for 69 persons who had indicated they were available for, but not seeking work.

TABLE XI-a

EDUCATION OF THOSE AVAILABLE FOR, BUT NOT SEEKING WORK

SCHOOL YEARS COMPLETED	No. of Persons
0 through 4 years	8
5 through 8 years	49
9 through 11 years	154
12 years	121
13 through 15 years	16
16 years and over	8

YEARS OF VOCATIONAL TRAINING

YEARS COMPLETED	No. of Persons
None	193
One year	96
Two years	64
Three years or more	3

TOTAL YEARS WORKED IN PAST FIVE

YEARS WORKED	No. of Persons
None	183
Some, but less than one	84
One to two	48
Two to three	32
Three to four	9

IMMEDIATELY AVAILABLE WORK FORCE

TABLE XII

MAJOR OCCUPATIONAL GROUP	NOW ACTIVELY SEEKING WORK		NOW WORKING OUTSIDE COUNTY		AVAILABLE, BUT NOT SEEKING WORK		LABOR FORCE ENTRANTS		TOTAL	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Professional, Technical and Managerial	3	2	25	11	2	2	5*	13*	35	28
Clerical	3	26	0	10	1	11	0	19	4	66
Sales	2	11	3	0	3	15	2	18	10	44
Service	3	22	1	0	4	49	3	21	11	92
Fishery, Farming and Forestry	19	3	5	0	11	1	39	3	74	7
Processing Work	4	12	2	0	17	59	6	8	29	79
Machine Trades	9	0	3	1	11	5	11	0	34	6
Bench Work	15	0	2	0	13	5	0	0	30	5
Structural Work	22	0	33	0	7	0	11	0	73	0
Miscellaneous	3	16	21	0	3	18	27	8	54	42
TOTAL	83	92	95	22	72	165	104	90	354	369

*4 digit entry only, for this group only.

THE HUMAN RESOURCE OF JEFFERSON COUNTY

In seeking to determine the immediately available human resource of Jefferson County, the Smaller Communities Study Group attempted to analyze the occupational capabilities of four basic groups: (a) those who were unemployed and actively seeking work (b) those who were employed, but were commuting to work outside the county (c) those who were available for work but were not seeking work at the time of the study and (d) those who could normally be expected to enter the labor force during the next five years.

From information developed during the course of the study, it also appears that there may be a few Jefferson County residents now employed in wage and salary work within the county who are definitely working below either their present capability or ultimate potential. This group was not considered as an immediate resource because of some conflicting imponderables which are not subject to resolution.

THE UNEMPLOYED

To take up the groups in the order named, it is proper that those who are presently unemployed and seeking work should be considered first. This group encompassed 175 persons, of whom approximately two-thirds were in the 16 to 24-year age group. Nearly one-half were also in the labor force entrant group, in that they were either still in school, or were current year high school graduates. Most of the current year graduates were females, although the other age groups were nearly evenly divided as to sex.

Practically none of the females who were seeking work had more than desultory work experience, and most had only such limited vocational training as that offered in high school. The exceptions were mostly women in the 25 to 44-year age groups who had recently moved to the county with their husbands, and many of these had experience only in occupations which were non-existent in the county The fact that these women are continuing to seek work in the face of a definite lack of market for the skills they do possess, is indicative of excellent motivation and even more indicative of the fact that they could probably be a ready source of available workers for any type of industry offering employment suitable for females. The majority of all the males seeking work were still in school and could offer their services only on a seasonal basis. Aside from the undergraduates, the male unemployed were composed mostly of those who were frictionally unemployed. As such, they were pretty well distributed over the major occupational groups other than Professional, Clerical and Sales. For specific occupations, see Table VIII, pages 35 through 39.

THE COMMUTERS-OUT

Of all the persons (3,657) who performed some type of work during the survey week, 193, or slightly more than five percent, were commuting to work outside the county. Five of those commuting were self-employed outside the county, and commuted home on week-ends.

The largest single group were residents of the Warm Springs area who were mostly employed at Kah-nee-ta resort in Wasco County. This group would presumably not be available for employment in Jefferson County, if offered; hence, a resumé of their occupational skills is not important. However, there were seven Warm Springs residents who were commuting to Crook, Deschutes and Multnomah Counties who would likely be interested in employment nearer to their homes. These seven, with the 133 other residents of the county who are commuting to work elsewhere offer a wide variety of occupational skills, including the Professional. With the exception of the five who were self-employed, it could safely be assumed that most of these people would be available for suitable work within the county. Slightly more than three-fourths of the commuters are male, and approximately one in five are normally employed in the Structural Trades major occupational group.

In Table XV on page 49, 18 commuters from the Camp Sherman area, in addition to the 53 Warm Springs Kah-nee-ta commuters, have been included. However, it appears doubtful that these workers would be generally available in other areas of the county, since their present work is actually closer to their residences.

AVAILABLE, BUT NOT SEEKING WORK

Eminently worth consideration as a potential source of manpower are the majority of the more than 350 persons who indicated to the Household Study Group that they were ready, willing and able to accept employment, but were not, for various reasons, actively seeking work at the time of the study.

Almost one-half of this group were in the 16 to 24-year age bracket, and many of these were still enrolled in school, although in summer vacation at the time of the study. As with those who were seeking work, a large percentage of this younger group were females. In Table XII on page 43, current school enrollees, both high school and college, have been deleted because of their confinement to seasonal availability.

In the 25 to 64-year age bracket, the persons available for, but not seeking, work were almost exclusively from the distaff side. This group offers some very interesting possibilities to any potential employer. Many of them have extremely valuable experience or training in occupations which do not presently exist in the county, but most are married and see no need to prosecute a very vigorous search for work which does not exist in the area, or to accept work in which they are not experienced and which would, in most cases, be considerably below their capabilities.

The over 65-year group, which is almost evenly divided between the males and females, also offers some interesting possibilities. Approximately one-third are available for part-time work only, either on a reduced hourly basis, or full-time for short periods during the year. Some of them do have outstanding skills and experience to offer, and might well be worth the consideration of any prospective employer. For specific occupations found in this group, see Table VIII pages 35 through 39.

LABOR FORCE ENTRANTS

The current school enrollment of Jefferson County indicates approximately 730 of those presently in school will either complete high school or become dropouts during the 1969-1973 period. On the basis of past experience, it can be expected that approximately 85 of these will become dropouts, for one reason or another. Of the 645 who can be expected to complete high school, approximately 290 (again on the basis of past experience) can be expected to continue their education elsewhere. The number of these who will return to the county, either as college dropouts or as Professional workers, is highly problematical. Lack of job opportunities will probably preclude the return of the majority. In any case, they are not taken into account in this report as a potential labor supply.

Of the 355 high school graduates who do not continue their education, approximately 45 of the males can be expected to enter the armed forces and roughly 50 of the females can be expected to marry and consequently not enter the labor force. The remaining 260 high school graduates, augmented by an estimated 55 of the 85 dropouts, would indicate a total of more than 300 labor force entrants during the next five years. Or, if evenly spaced, approximately 60 new labor force entrants per year. As a part of its youth services program, the Smaller Communities Mobile Team interviewed approximately 194 of those enrolled in high school, and who could be expected to enter the labor force within the next three years. Most of these interviews went into the counseling phase, and many involved aptitude testing as well. One of the by-products of this phase of activities was a fair working knowledge of the general characteristics of the prospective labor force entrants and what, in general terms, they will have to offer prospective employers in Jefferson County. The occupational capabilities of this group are set forth in tabular exposition on page 43 under "Labor Force Entrants." However, this tabulation also includes some 1968 high school graduates, chiefly female.

Classifications assigned to this group pretty well cover the occupational spectrum, with the exception of the Professional and Bench Work groups. Of the 194 primary classifications assigned, 117 were in the entry groups,

indicating the individuals were not completely qualified in any specific occupation. Of this 117, more than one-half (64) had no actual job experience and the classification was assigned solely on the basis of counseling, or counseling and testing. For the remaining 53, the job experience or job preparation was so slight that only entry classification seemed desirable. A total of 33 of the 194 persons in this group were also assigned secondary classifications.

CUT-OFF SAW, WARM SPRINGS MILL ON THE INDIAN RESERVATION.

Altogether, the labor force entrant group in Jefferson County, both those now available and those who will enter the labor force in the next two years, constitute a manpower source that should not be overlooked in community planning. Unfortunately, presently planned employment expansion will not be great enough to absorb these youngsters as they come into the labor force. As a result, unless there is some step-up in present planning, many of these youngsters will be lost to the area.

SORTING POTATOES ON PROCESSING LINE.

TABLE XIII

VOCATIONAL TRAINING INTERESTS
(Persons 16 years of age and over)
JEFFERSON COUNTY
July 7 - 13, 1968

MALE		FEMALE
3,095	TOTAL Persons in Age Group	3,144
	TYPE OF TRAINING DESIRED	
27	Technical	39
27	Clerical	156
7	Sales	26
11	Service	67
8	Farm,Fishing,Forestry	0
3	Processing Occupations	0
67	Machine Trades	3
17	Bench Work	2
52	Structural Work	0
18	Miscellaneous Occupations	30
237	TOTAL Interested in Vocational Training	323
27	Interested in Professional Training	48
264	TOTAL Interested in Training	371
	OF THOSE INTERESTED IN TRAINING:	
80	(a) Total who were employed during survey week	37
81	(b) Willing to leave the area for training	109
48	(c) Willing to leave area for employment	23
	(d) Could finance own training	
82	1. If available locally	132
8	2. If out of the area	0
	(e) Assistance needed, if out of area	
11	1. Tuition only	16
23	2. Tuition plus subsistence	59
47	3. Tuition and subsistence plus allowance	34

Almost one of every ten persons above the age of 16 in Jefferson County indicated an interest in further training during the course of the Household Study conducted in that area. The majority of the 635 indicating an interest were interested in either vocational training or basic education; only 75 indicated an interest in training for the professions.

Only a relatively small percentage of those indicating an interest pursued the matter to the point of completing a preliminary registration and keeping an appointment for a counseling interview. Oddly enough, almost all of those indicating an interest who were also employed at the time, did complete the preliminary registration and a high percentage of these did show up for counseling interviews.

All in all, it appears that the majority of those showing genuine interest were seeking to upgrade themselves, either in their current employment, or in an effort to get out of a dead-end job. A considerable number of those interested were seeking vocational training of a type that could conceivably be provided through adult education facilities in the local schools (e.g., refresher Clerical, some of the Metal Trades, and Basic Education).

Only 190 of those interested were willing to leave the area to secure training. Less than half of these were interested in accepting work out of the area. Close to one-half of the males and one-fourth of the females, who completed preliminary registrations in connection with possible training, were employed at the time. Most of this employment, particularly that of the female contingent, was in seasonal work, which was of short duration or otherwise unattractive.

Close to one-half of all those interested were school dropouts at the high school level or below. Table XIII which is a tabular resume of training interests, does not include those persons who were interested in training patently intended for hobby purposes only.

TABLE XIV

VOCATIONAL TRAINING OF PERSONS 16 YEARS OF AGE AND OVER
(Whether in the Labor Force or Not)

YEARS OF TRAINING	HIGH SCHOOL		MILITARY		APPRENTICESHIP		TRADE SCHOOL	
	Male	Female	Male	Female	Male	Female	Male	Female
ONE YEAR	862	309	390	5	56	6	493	312
TWO YEARS	20	723	0	0	23	1	27	134
THREE YEARS	4	126	0	0	63	0	4	0
TOTAL	886	1,158	390	5	142	7	524	446

TOTAL - NO TRAINING
Male 1,847
Female 1,940

TOTAL - MORE THAN ONE TYPE TRAINING
Male 694
Female 412

VOCATIONAL TRAINING OF PERSONS 18 YEARS OF AGE AND OVER
(In the Labor Force)

ONE YEAR	759	103	357	0	15	2	349	203
TWO YEARS	5	276	0	0	20	0	27	13
THREE YEARS	3	84	0	0	56	0	0	0
TOTAL	767	463	357	0	91	2	376	216

TOTAL - NO TRAINING
Male 1,336
Female 582

TOTAL - MORE THAN ONE TYPE TRAINING
Male 502
Female 164

48

THE COMMUTERS OUT

TABLE XV

COMMUTING FROM	TOTAL	COUNTIES COMMUTING TO: WASCO	WHEELER	CROOK	DESCHUTES	LINN	MARION	OTHER
Warm Springs Reservation	60	53	0	2	2	0	0	3
Madras Area	56	9	1	7	11	1	3	24
N.W. Central Area	18	2	0	3	9	0	0	4
N. Cent. & Eastern Area	4	0	1	0	0	0	0	3
S. Central Area	37	0	0	3	27	0	3	4
Camp Sherman Area	18	0	0	0	11	6	0	1
TOTALS	193	64	2	15	60	7	6	39

The areas under 'commuting from' shown in the above table should perhaps be more clearly defined. The Reservation shows only the Jefferson County portion; the Madras Area encompasses more than the city limits, a sort of metropolitan area; the North Central Area includes the Agency Plains from Metolius to the north county boundary and from Madras west to the Deschutes River; North Central and Eastern Area takes in all territory east of Highway 97 and Highway 26, excluding Madras; the South Central portion includes everything south of Metolius to the county line and between the Crooked River and Highway 26; and Camp Sherman Area includes the western part south of the Reservation and west of the Crooked River Canyon.

Of the total of 193 commuters-out of Jefferson County, 60 are commuting from the Reservation and 133 from the rest of the county. Most of those commuting from the Jefferson portion of the Reservation (53) are working in Wasco County at the Kah-nee-ta resort. Thirty-one are in Service occupations, a few women in Clerical, and the rest are evenly divided among Professional, Structural and Miscellaneous occupations. There are 37 males and 23 females in this group. The county outside the Reservation has 133 commuters-out, 110 males and 23 females. The men tend to the Structural trades (33), Professional (29), and Miscellaneous (21), with a few in Service, Forestry, Processing, Machine Trades, and Bench Work. The women are almost all in either Professional occupations (12) or Clerical and Sales (10, with one lone girl in Machine Trades, who runs a cut-off saw.

Wasco County carries the bulk of the commuters (64), Deschutes runs second with (60), followed by Crook (15), Linn (7), Marion (6), Wheeler (2), and 39 others commuting to such places as Portland, Lakeview and the State of Washington. Out of the above 39 commuting to other areas, the bulk are construction workers divided between the State of Washington and Southern Oregon. It is assumed that most of these will soon move their families out to the new areas. The record for distance is held by one forester who commutes to Malheur County, coming home on weekends, only.

OCCUPATIONAL GROUPS DEFINED

PROFESSIONAL, TECHNICAL AND MANAGERIAL OCCUPATIONS

This category includes occupations concerned with the theoretical or practical aspects of such fields of human endeavor as art, science, engineering, education, medicine, law, business relations and administrative, managerial and technical work.

Most of these occupations require substantial educational preparation (usually at the university, junior college, or technical institute level).

CLERICAL OCCUPATIONS

This category includes occupations concerned with preparing, transcribing, transferring, systematizing, and preserving written communications and records, collecting accounts and distributing information.

SALES OCCUPATIONS

Includes all occupations primarily concerned with assisting or influencing customer choice of products, commodities or services. It also includes some occupations in customer service closely identified with sales transactions but where there is no actual participation in the sales process (eg: carpet layers, drapery hangers, delivery boys, etc.).

SERVICE OCCUPATIONS

Includes those occupations concerned with the performance of services for persons which require either contact or close association with the individual for whom the service is performed; occupations concerned with protection of public or private property, occupations related to the servicing of buildings; occupations in cleaning, dyeing, and pressing; and attendants in amusement and recreation facilities.

FARMING, FISHERY, FORESTRY AND RELATED OCCUPATIONS

This category includes occupations concerned with growing, harvesting, catching and gathering land and aquatic and animal life and the products thereof, and occupations concerned with providing services in support of these activities.

PROCESSING OCCUPATIONS

Includes occupations concerned with refining, mixing, compounding, heat or chemical treating or similarly working materials or products. Knowledge of a process and adherence to formulas or other specifications are required in some degree. Operation of equipment or machinery is often involved.

MACHINE TRADES OCCUPATIONS

This category includes occupations concerned with feeding, tending, operating, controlling, and setting up machines to work such materials as metal, paper, wood, and stone. The relationship of the worker to the machine is of prime importance in establishing the level of complexity at which the work is performed. At the higher levels, understanding of machine functions is frequently combined with the exercise of worker judgment based on knowledge of related subjects such as mathematics, blueprint reading, etc. At the lower levels of complexity, coordination of the eyes and hands is the most significant factor. This category also includes mechanics and repairmen.

BENCH WORK OCCUPATIONS

This category includes occupations where body members, hand or bench machine tools or a combination thereof are used to fit, grind, carve, mold, paint, sew, assemble inspect, repair or similarly work a variety of objects.

The work is usually performed in a set position in a mill, shop, or plant, at a bench, work table or conveyor. The more complex of these occupations requires the use of worker judgment; in the less complex, the worker follows a standardized procedure.

STRUCTURAL WORK OCCUPATIONS

Includes occupations concerned with fabricating, erecting, installing, paving, painting, repairing, and similarly working structures or structural parts, such as bridges, buildings, roads, motor vehicles, cables, airplane engines, girders, plates, and frames. They involve the use of hand or portable power tools in working such materials as wood, metal, concrete, glass and clay. Except for factory line production, the work is usually performed outside a factory or shop environment.

MISCELLANEOUS OCCUPATIONS

Includes occupations concerned with transportation services; packaging and warehousing; utilities; amusement, recreation, and motion picture services; mining and logging; graphic arts, and activities not elsewhere classified.

PART OF THE INDUSTRIAL PARK AT MADRAS.

INDUSTRIES DEFINED

CONTRACT CONSTRUCTION

This group includes all firms primarily engaged in construction by contract, whether of buildings, highways, pipe lines, excavating or general construction. It also includes specialty contractors, such as painting, air conditioning, roofing, flooring, electrical, plumbing, or plastering. Construction is construed to mean new, additional alteration or demolition. Installation of pre-fab materials or equipment by a contractor comes within this division. However, when such installation is made by the vendor or manufacturer of the materials or equipment, it is not considered as construction.

MANUFACTURING

With the exceptions hereinafter noted, this division includes all establishments primarily engaged in altering, combining or adding to materials or substances for the purpose of enhancing the value or usability.

Not included in manufacturing are such activities as processing of raw materials on a farm, fabrication at a

CAR LOADING POTATO PRODUCTS AT CULVER.

MANUFACTURING (Cont.)

construction site by a contractor, or processing for retail sale on the premises of firms ordinarily engaged in retail trade.

Treated in this study as separate divisions of manufacturing are:

1. Lumber and wood products, which includes logging and other operations in connection with commercial tree farms; primary processing of lumber and veneer, prefabrication of wooden buildings or structural members thereof, and manufacture of shaped wooden products.

2. Paper and allied products, which includes the manufacture of pulps from wood and other cellulose fibres; the manufacture of paper and paperboard, and the conversion of paper and paperboard into various products.

3. Other manufacturing, which includes all manufacturing operations not specifically covered in groups one and two, above.

TRANSPORTATION

Railroads, motor carriers, warehousing, water transportation; airlines, freight forwarding, pipe lines, and local and suburban transportation.

COMMUNICATIONS

Telephone and telegraph; radio and television broadcasting, and commercial shortwave systems.

UTILITIES

Light, heat and power, whether electric or gas; water supply, and sanitary services.

WHOLESALE TRADE

Includes all establishments primarily engaged in selling merchandise to retailers or other industrial, commercial,

or professional users without regard to the type of merchandise purveyed.

RETAIL TRADE

Includes all establishments primarily engaged in selling merchandise for personal, household or farm consumption and in rendering service incidental to the sale of goods.

FINANCE, INSURANCE AND REAL ESTATE

In addition to banks and trust companies and insurance business of whatever nature, this division includes credit agencies, holding companies, brokers, dealers in commodities and contracts, owners, lessors and developers of real estate.

SERVICE AND MISCELLANEOUS

Under service, this group includes hotels and other lodging places; trailer parks; personal, business, repair, and amusement services; medical, legal, engineering and other professional services; educational institutions (other than government operated); non-profit membership organizations and other services such as agricultural, animal husbandry, and horticultural services when performed on a fee or contract basis.

Under miscellaneous is included such activities as fishing, forestry and mining, where no individual activity encompasses more than one percent of the total wage and salary employment.

GOVERNMENT

This industrial group includes all federal, state, local and international activities such as legislative, judicial and administrative functions as well as government owned and operated business enterprises, such as utilities, hospitals, and other such services.

Treated separately are all government activities in the educational field.

METHODOLOGY

In order to determine current manpower use and secure a projection of future manpower need in Jefferson County, all employers of five or more workers were personally interviewed and all employers having one, but less than five workers on their payroll were contacted by telephone. All employers were asked to detail their current employment by occupation and sex; whether or not there were any current vacancies in the occupations; their estimates of employment in each occupation for July of 1970 and July 1973; and the starting and maximum pay scales in each occupation.

Employers of five or more persons were asked to state their minimum hiring requirements, in terms of training and/or experience in hiring for individual occupations, and whether or not in-plant training was provided.

Concurrently with the gathering of data in respect to current manpower use and future manpower need, procedure was set in motion to gather data with respect to the skills and educational profile of all county residents above the age of 16, whether in the labor force or not. This procedure consisted of a Household Study, encompassing every household that could be located in the county. Actual work of gathering data for this study was done by local residents, hired in five different areas (map inside back cover) throughout the county expressly for this purpose. Thorough training was afforded to those hired prior to the start of the study. Since each study worker was thoroughly familiar with the area to which they were assigned, there is no reason to believe that any household in the county escaped attention.

A total of 2,868 households were found in the county by the survey workers. Personal contact was made to 2,695 of these households, and mail-in forms were left for the remaining 173 to complete. Of the 2,695 households personally contacted, 89 either refused any information, or would give only partial information. Of the 173 forms left for completion by the householder, 76 were returned complete, and another 33 were returned in various stages of completion.

In addition to the 2,606 households from which complete returns were secured, another 107 furnished at least complete data with regard to household population, age and sex. From the total 2,713 households reporting complete population, sex, and age group data, an average of 3.43 persons per household was obtained. This average was then applied to the total 2,868 households, since it was assumed that the characteristics of the non-respondent five percent were not materially different from those who did respond. All data, other than population, were similarly expanded.

Schedules used by the Household Study workers were designed to cover the following 15 items of basic information:

1. Length of time the household had been in the county and type of present residence location; whether rural farm, rural nonfarm or in an incorporated area. (Note: there are no urban areas in Jefferson County).

2. Total number in household, regardless of ages, broken into three groups: those under 10 years of age, those 10 to 15 years of age, and those 16 years of age and over.

3. Age, sex, marital status, relationship to head of household and physical condition of each member of the household over the age of 16.

4. Attachment to the labor force of each member of the household over the age of 16 during the survey week.

5. Attachment to the labor force of each household member over the age of 16 for the 52 weeks ending with the survey week.

6. Occupation(s) in which each household member over the age of 16 reported having worked, either during the survey week, or the 52 weeks ending with the survey week.

7. For each household member who reported having sought work during the 52 weeks ending with the survey week, the principal work performed during the preceding five years, if any, and the type of work sought.

8. Which members of the household, if any, were ready to move elsewhere for permanent work, with the type of work desired and the minimum wage acceptable.

9. Which members of the household, if any, were ready to leave home for temporary work, with the type of work desired and minimum wage acceptable.

10. Which members of the household, if any, were available for seasonal agricultural work, including the crops interested in and the minimum wage desired.

11. For those household members who were operating a farm, whether or not they were available for full-time nonfarm work, with the type of work, wages desired, maximum commuting distance willing to travel and whether or not taking such a job would reduce the size of the farm operation.

12. Which household members, if any, were commuting to work outside the county, with the type of work involved and the location.

13. The number of years of completed schooling for each member of the household over the age of 16, the number of years and type of vocational training, if any, and whether or not this vocational training had ever been used in his work, or of help in obtaining work.

14. Which members of the household, if any, were now interested in vocational training, and the type of training, if interested.

15. For those members of the household who were interested in vocational training, the extent to which they would be able to finance their own training.

With regard to items 4 and 5 of the basic data, the schedules were also designed to show whether or not the schedule respondent was self-employed, either farm or nonfarm, a wage worker, either farm or nonfarm, or was engaged in unpaid family work. Also, if the respondent was employed less than thirty hours during the survey week, whether they were in addition either seeking work, ready for work but not looking, engaged in domestic duties, attending school, retired, or unable to work. This same information was also developed for the 51 weeks preceding the Household Study, including the number of weeks spent in each category.

All respondents who reported seeking work were asked to complete registrations for work with the Mobile Team at scheduled points throughout the county, as were those who reported being ready to work but not actually seeking work.

Those respondents who reported an interest in vocational training were furnished preliminary registration forms, and given appointments at specific times and places throughout the area for return of these forms.

In addition to the data developed with regard to the human resource of the area, data were also developed covering the natural resources, business trends, and economic problems of the area. Most of this was accomplished through research into reports of studies made by various agencies, (see Bibliography on page 55) but some was necessarily compiled through actual contacts with operating industries, government officials and professional workers, both within and outside the county.

BIBLIOGRAPHY

History of Central Oregon, Western Historical Publishing Co., Spokane, Wash., 1905

Jefferson County Reminiscences, Binfords and Mort., Portland, Oregon, 1957

A Brief Look at the Progress of the Warm Springs Reservation of Oregon, 1968

Profile of Oregon Churches, Oregon Council of Churches, 1963

Resource Analysis, Jefferson County, Oregon State University, 1967

Survey of Potential Industry of Madras, Oregon 1963

Certificate of Population Enumerations and Estimates of Incorporated Cities and Counties, Portland State College, 1967

Soil Survey - Deschutes Area, U.S.D.A. and Oregon Agricultural Exp. Station, 1958

Facts about Madras and Jefferson County

Deschutes River Basin, State Water Resources Board, 1961

Timber Resource Statistics for Central Oregon, U.S. Forest Service Bulletin, PNW-24, 1968

Oregon Parks, Oregon State Highway Department

Liquid Waste Disposal in Central Oregon, Federal Water Pollution Control, 1968

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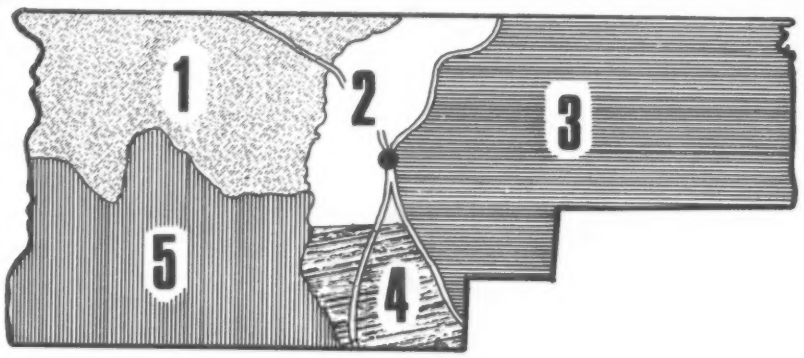
A word of thanks is also due to the many employers who took time out from their own business day to cooperate in furnishing information for the study, which could not otherwise have been secured. This is also true of the many householders who willingly complied with requests for information in connection with the study.

Finally, a word of thanks to the Press of the county, who kept the public well-informed of the objectives and progress of the study.

AREA BREAKDOWN



1. Warm Springs Reservation (Jefferson County Portion)
2. North Central Area
3. Eastern Area
4. South Central Area
5. Camp Sherman Area

DESCRIPTION OF AREAS

The Reservations show only the Jefferson County portion; the North Central Area includes the Agency Plains from Madras west to the Deschutes River; Eastern Area takes in all territory east of Highway 97 and Highway 25, excluding Madras; the South Central portion includes everything south of Metolius to the county line and between the Crooked River and Highway 26; and Camp Sherman Area includes the western part south of the Reservation and west of the Crooked River Canyon.

All data with regard to present manpower use and possible future manpower need, along with data used to set up the occupational profiles of the labor force were transferred to key punched documents and will be retained indefinitely in the Central Office of the Oregon Department of Employment. Actually, only a portion of the developed information is published in this brochure, because of limitations of space and general interest. Anyone wishing additional information concerning the occupational potential of the people of the area should send his request to the address printed below:

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